CULTURE AND THE GAMBLING PHENOMENON

Proceedings of the 11th National Association for Gambling Studies Conference

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Edited by Alex Blaszczynski

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Australia

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11th National Association for Gambling Studies Conference
Culture and the Gambling Phenomenon

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The Australian Institute for Gambling Research offered a prize for the best paper presented at the conference and financial support to cover the registration costs for one registrant to enable him to attend the conference. Thanks are offered to Jan McMillen for her generosity.
Foreword

The 2001 National Association of Gambling Studies was held in the idyllic setting of South Steyne Beach in Manly, a picturesque suburb with both harbour and ocean foreshores. The theme of the conference was intended to draw upon the themes of culture in all its guises and how such culture may influence or shape gambling. In this, it well achieved its objectives. The papers contained within this Proceedings reflect the diversity of gambling as found in the culture of not only as it relates to ethnicity, or more correctly, culturally and linguistically diverse community groups, but also to issues of the culture of responsible gambling, the culture of technological advances and the culture of treatment.

One of the most gratifying outcomes of the Conference was the coming together of representative from industry, government, welfare organisations and treatment providers. The excellent keynote speakers provided a variety of perspectives and opened up a vista of topics and issues that led to productive and exciting, if not excited, dialogue across all fronts. It is only by such dialogue that a balanced approach to meeting the specific needs of all vested stakeholders can be met. It is imperative that responsible gambling practices and the implementation of harm minimisation derived from and guided by empirical data are introduced if the issue of harm and problem gambling in the context of the Australian gambling society is to be dealt with effectively.

If the concept of luck is to believe in, the series of events surrounding the conference indicated that the organising committee’s quotient ran out rapidly. The events of September 11 caused a major disruption to the overall planning of the conference. Uncertainty over the American’s response and fear engendered by international travel led to late minute withdrawals and uncertainty over delegates travel arrangements. These difficulties continued well into the final stages of organising schedules and the conference itself. Adding to the woes of the committee, the weather proved against us. It was intended that the ferry trip to Darling Harbour would commence from Manly Wharf but last minute storms precluded this. Last minute hiring of buses to transport delegates to the ferry from Taronga zoo saved the situation. By all accounts, however, the trip and the dinner were delightful. At this stage, out of respect for a few embarrassed delegates, little shall be said of the refreshing and entertaining glimpse on gambling provided by our international quest speaker from Harvard University, or thereabouts, the most eminent Professor Iver Shorebet.

The organisation of the conference was made easier and all the more pleasurable because of the enthusiasm and untiring support of all the members of the organising committee. I would like to extend my personal thanks to each and every member, but in so doing, mention Kirsten Enersen and Maree-Jo Coughlan in particular for their unselfish attitude in allowing me to delegate all the work to them.

I now look forward with a renewed vigour in anticipation of a more relaxed time at the next NAGS Conference to be held in Melbourne next year.

Alex Blaszczynski
Chairman, Organising Committee.
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What can we learn from “Mr. Market”

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Abstract
This paper reviews the new field of behavioural finance and investigates what can be learnt which might be useful in working with problem gamblers. The conclusion is reached that the studies showing the pain of loss can be incorporated in treatment strategies and that the overconfidence noted in share market trading may translate to gambling with need for counsellors to be able to dampen this down.

Although Paul Slovic (1969, 1972) wrote articles looking at 1) how stock brokers make decisions and 2) a study of human judgement and the influences in decision making, the relatively new field of behaviour finance is credited with being started by Kahneman and Tversky in 1979 with a pivotal article on what they called Prospect Theory (Kahneman & Tversky, 1979). However, an earlier article in Science also laid groundwork (Tversky & Kahneman, 1974).

Tellingly the authors noted at that time that:
“A person who has not made peace with his losses is likely to accept gambles that would be unacceptable to him otherwise”.

These authors were making reference to “gambles” on the stock market, a point in which the paper will later pursue.

With this background, the main starting point for the field of behavioural finance appears to be papers and conferences in 1984 and 1985 that used the term “behavioural finance”, who developed and then applied the Kahneman and Tversky findings into the real world of actual decisions in the market place.

The findings of Kahneman and Tversky (1979) indicated that the general view in economics is that people are rational and risk averse. A choice for a risky venture would only be taken if the reward seemed sufficiently high to justify the risk. This choice would be balanced rationally by an understanding and application of the odds.

Some psychology studies suggested that this finding was not accurate. For example, risk-seeking preferences were more frequently chosen when the choice was a sure loss versus the substantial probability of a larger loss. A situation created for study was a definite loss of $80, against an 85% chance of losing $100 and a 15% chance of losing 0. More choose the gamble yet the monetary expectation is worse. Eighty five times in one hundred trades you
lose $100 for a total loss of $8,500 and naturally 15 times you lose 0. Clearly for 100 trades at $80 loss each time you lose a total of $8000. So the gamble, rationally, is worse, yet the majority choose it. Clearly, an alternative explanation from previous economic assumptions is more accurate.

Where Kahneman and Tversky (1979) departed from views, held as far back as 1738 by the famous mathematician Bernoulli, that people make choices by assigning a utility or value to a state of wealth, was to suggest that choices should be analysed not from a state of wealth aspect but from a change of wealth. People, they say, identify consequences as gains or losses relative to a neutral point and this can lead to inconsistent choices “because the same objective consequences can be evaluated in more than one way”. Kahneman & Tversky (1979) introduced a function that associates validity to gains or losses and called this the “value function”. To apply this they assumed:

1) Gains have a positive value.
2) Zero gain/loss has a subjective value of zero.
3) Losses have a negative value.

However, the curves differ. The value function for gains is concave downwards (i.e. each extra dollar gained adds less value than the preceding one). But losses are convex, again reflecting choice when faced with losses. The curves do not “mirror image” however, the one for losses being steeper. This reflects the different values placed on losses - for example the choice studies showed a negative value (loss) of $400 is half the negative value of $1000. That is to say early losses are felt more painfully, disproportionally to their actual economic objective value. Indeed Kahneman and Tversky (1979) concluded that a loss of $100 is equal to the positive gain of $200 thus leading to the famous statement that losses are twice as painful as the pleasure of winning the same amount as that lost. This statement is not entirely the case as it applies to early or first losses. This point is often dismissed. At $1000, for example, in their studies subjective pain matched objective values.

The relevance for our gamblers is the chasing of those early losses either within a session or long term. Later, it matters proportionally less, as the pain is the same. However, we need to encourage those trying to control their gambling to stick to limits even though the pain of stopping may be intense and remind those at risk of relapse that starting to gamble again and losing will create the strong desire to chase.

The disposition effect refers to the notion that people are disposed to sell winners too early, lock in profits and avoid regret, but hang onto losers too long to avoid the pain of a realised actual loss. The question naturally arises as to whether this works in practice? Two studies indicate that the disposition effect does arise in practice. While there may be additional evidence for this effect, it is difficult work to substantiate as clearly access must be gained to anonymous but real trading accounts and this is not as easy as it sounds.

The first study was by Schlarbaun and colleagues (1978). From an analysis over seven years the findings disputed any disposition effect, noting short term trades seemed to reflect possible skill (i.e. generated profits rather than taken profits). On that score however, 40% of trades were losses and “only 52% yielded net returns in excess of the mean return available during the period on Treasury Bills”. Clearly the stock market is no sure thing. The authors, in fact, foreshadowed moves to mutual funds, as subsequently happened, because individual analysis and security selection did not seem to justify the time and effort as few out performed the market.

More recent research by Odean and Barber (1998), on much larger samples from discount brokers, did support the disposition effect. Utilising 10,000 accounts trading through 1987 to
December 1993, over 162,000 trades were analysed. More evidence has been compiled through the 90’s. In short, they conclude the disposition effect does exist, but in addition to another dimension - over confidence leading to excessive trading (more so amongst males than females) which dampen or eliminate profits through commissions and tax. Farleigh (2001) notes most money in finance is made through commissions and management fees.

Odean (1998) notes psychologists find people give too much credit to themselves and “do not attribute enough of that success to chance or outside circumstance”. In a long bull market, such as that just finished “aggregate overconfidence and consequent trading rise”.

In summary, behavioural finance argues and believes it has demonstrated that investors, including fund managers,
- Are over-confident;
- May carry biases into decision making that are not objectively sustained;
- May experience illusions of control when it is really chance affecting the outcome;
- Hold losses and sell winners too quickly. Indeed they may throw good money after bad to regain losses.

Before briefly linking these findings to possible use in our problem gambling arenas, it is important to note these findings are disputed by some. Hersh Shefrin (2000) in his book “Beyond Greed and Fear” writes as a staunch behaviouralist but does also present and debate arguments to rebut these views from more traditional fields. However, the findings appear robust enough to warrant our consideration.

We can learn from this field the following:
1) Early losses are the most devastating. Hence gamblers must be informed of this and should be urged to be aware of these feelings and not succumb to the desire to continue gambling to ease the pain with unlikely wins.
   Allied to this are two sub sections:
   a) The gambling fallacy: Although referred to in behavioural finance literature, we do to need emphasize that all is random and wins do not automatically follow losses.
   b) Professionals must assist people work through their total losses. Although most downplay these and most therapeutic approaches work on changing future behaviour, it is believed that people underestimate the ongoing regret for what has been done. Behavioural finance research would support this.

2) Over confidence: The idea of winning still persists often even when people say it does not. They feel they can win on any one-day and this may lead to the decision to gamble. Constant reminding of the facts is essential.

3) Gender differences matter: Behavioural finance indicates that males trade more often than women (45% more so) and single men trade 67% more often than single women (Odean & Barber, 2000). The result is that women do better than men.

In summary, behavioural finance is a new field that shows promise in helping people understand problem gambling behaviour and should be further explored.
References


Culture and the prevention of problem gambling

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Abstract
While pre-dominant models of prevention focus on the prevention of specific diseases and disorders and/or on the minimisation of harm arising from these, there are three theoretical and potential intervention areas, all with a focus on the reconstruction of subjectivity, that require much greater attention: 1) The meaning systems and social interaction patterns within various cultural groups (including dominant one[s]). What is the meaning of ‘disorders’ (like problem gambling) in different cultural settings? How are they generated and conceptualised – and how do they relate to other dynamic aspects of the social system under study? 2) Community action that is focused on creating healthy communities, and 3) Person-oriented prevention that reinforces mediating structures in the form of families, communities and other living networks of people. Approaches to the prevention of ‘problem gambling’ will be discussed within the above frameworks, with theoretical and possible strategic associations between the three highlighted.

Introduction
The present contribution, whilst resting on solid theory, empirical evidence and common sense, takes a bit of a punt at creative speculation and intends to suggest the interweaving of three theoretical - and possible intervention – areas, the common denominator of which is the recognised need to reconnect our understandings of the personal-individual with appropriate conceptions of the social-collective (or, in still more general terms, the need to re-connect the societal-structural dimension with the dimension of human agency). While pre-dominant models of prevention (of problem gambling as well as of other forms of addiction) focus on the prevention of specific diseases and disorders and/or on the minimisation of harm arising from these, they overwhelmingly assume an individualised locus in which the disorder is thought to ‘reside’ and therefore needs to be addressed at. We are suggesting a re-insertion – indeed a reconstruction - of subjectivity within a web of social connectedness, including a sense of culture, a sense of health as a social construct and as a social ‘issue’, and a sense of community.
Part One: Culture as collective systems of meaning-guiding patterns of social interaction within identifiable social groups

Within the discourses of the ‘helping’ or ‘healing’ professions, one finds a common – and historically long-standing – split between the theorisations of the social/societal and the individual/personal. These splits are often referred to – if not ‘explained away’ – as encompassing the ‘macro’ – or ‘structural’ - and ‘micro’ – or ‘agency’ - dimensions of social and human reality and social interventions into these respective ‘halves’ are commonly conceived of in a dichotomous way (even if one regularly hears calls for complementarity between the two dimensions). This is not the place to enter in this debate; suffice it to say that various attempts at ‘closing the gap’ and to dialectically re-construct the relationship between social structure and personal experience have been developed in the past and continue to be developed within the context of different epistemological traditions. Neo-Marxist, Feminist and Critical Theory approaches have variously informed such attempts, as have phenomenological and post-modernist ones; bridging the theory-practice as well as the macro-micro gaps in reflective professional practice has been recognised as an indispensable task for

‘Critical professionals of the future [who] have to be able to interpret the world through cognitive frameworks and be adept at handling those frameworks in action. There can be no arbitrary limit to either of these dimensions of professional life. In a world that is subject to rapid and global change ... there can be no limit on the frameworks that professionals might deploy to make sense of their world’ (Barnett, 1997 cited in Cooper, 2001: 734).

And that certainly also includes the need to attempt and develop holistic models of (anticipated) practice – especially in the field of addiction and of so-called ‘problematic’ engagement in certain practices and ‘problematic consumption’ of certain substances. If, indeed, ‘addiction is endemic in western free-market societies’ and if it is related to the inevitable dislocation from ‘traditional sources of psychological, social and spiritual support’ such free markets cause to occur to people, then the need to look at both the structural and personal aspects of such problematic behaviours and at the interrelationship between them should be obvious, especially if ‘addiction professionals [are to gain] a view of their field that is both broader and more practical.’ (Alexander, 2000:501).

An action relevant frame of reference, derived from and informed by both structural and (inter- and intra-) personal theory fragments, needs to be developed to support conceptions of intervention and prevention, responding to problematic behaviours and to the structural aspects which have been identified as causally involved in their emergence and reproduction. Following Giddens (1979 and 1982), Bourdieu (1977) and others, one of the authors of this paper has attempted to develop such a frame of reference (Boulet, 1985 and 1988) and both of us have been involved in the implementation of research and consultancy activities – especially in the area of community development – which draw from such a framework, however implicit that may have been in the respective instances of our practice.

The fledgling field of ‘cultural studies’ can be understood as one contemporary attempt at theoretically filling the conceptual (and therefore also practical) gap between the notions and realities covered by ‘structure’ and ‘agency’ or – in other words – between subjective experience, everyday interaction, institutional process and societal structure (understood with Giddens as ‘recursive practice’). As one of us has said elsewhere (Boulet, 1985: 184) ‘culture allows us to inject meaningfully the dimension of collectivity in the otherwise individualising semantic context of subjectivity’ and therewith avoid the construction of the collective as ‘generalised (individual) personality’ or as simply an ‘ideal type’, as unfortunately so often happens in theoretical discourses emanating from the disciplinarian confines (and trenches!)
of the established human and social sciences. Often in these discourses, the only conceivable relationship between the dimensions of the macro and the micro is one of uni-directional causality, whereby the ‘environment’ (or macro) occupies the role of the behaviourist ‘stimulus’ and the human agent (enmeshed within micro situations or processes) is allowed the similarly behaviourist ‘response’ role – certainly in as far as those are concerned who are variously referred to as ‘clients’ of the helping or healing professions. The causality is – more often than not implicitly – allowed to run the other way around when those occupying positions of power are examined and dealt with as to their relationship with societal structure and process. It would be rather surprising to hear someone say that poor millionaires and members of governments are so terribly dominated and victimised – exploited? – by the way our societies are organised nationally and globally.... We usually do think about them as movers and shakers, as innovators, as being in control …

Be that as it may, Zygmunt Bauman’s earlier work (1973 and 1976) provides a useful conceptualisation – and operationalisation - of culture as he distinguishes (1973: 39) between its hierarchical, differential and generic notions and meanings, the first juxtaposing the ‘refined’ and ‘coarse’ ways of life (often with strong classist and ethnocentric undertones) and suggesting an educational ‘bridge’ between them, which those of the ‘coarse’ ways would have to travel across, in order to reach the more elevated and refined hierarchical levels. The second notion – the one often used when talking about ‘multicultural’ and such issues – concerns the ‘countless and endlessly multipliable oppositions between the ways of life of the various human groups’. The generic notion of culture, finally,

‘Is construed around the dichotomy of the human and the natural world, ... it is about attributes which unite mankind in the way of distinguishing them from everything else. In other words, the generic concept is about the boundaries of man and the human’ (Bauman, 1973, 1976).

Like Giddens (variously, 1979, 1982), Bauman attempts to avoid an antinomy between structure and culture (here understood in its generic sense: as collective processes of human meaning-giving) and he understands them as dialectically related.

‘Being structured and being capable of structuring seem to be the twin-kernels of the human way of life, known as culture.’ (1973: 51)

If cultural analysis is to be relevant for examination of the relationship between societal process and individual experience (and also minding Inglis’ (1994) warning that ‘culture [is] a mess, [which] refuses ... beautiful simplifications’), it has to avoid blunt oversimplifications and generalisations, so easily arrived at when one applies the notion of ‘culture’ in Bauman’s two first senses mentioned above. Culturally oriented and locally relevant social analysis needs to encompass the multitude of and the relationships between the wishes, the strivings and the experiences, the expressions and actions of the people – or of specific groups of people – as they pertain to the situations of their ‘normal’ daily preoccupations, dependencies and routines. It has to be sensitive to the fractures and fragmentations within and between people, their relationships and the processes impinging on them, especially the power differentials and the transactional forms in which these are expressed and, finally, the traces of oppressed and suppressed needs and aspirations and the ways in which the associated frustrations translate into sets of – often (self-) destructive – actions and practices. Or, again with Inglis (1994):

‘…whatever culture is, it isn’t something which divides without remainder into social data (the brute facts) and mental states (values and attitudes). But nor is it the material determination of consciousness by classes or economies. It lives (or dies) in the symbols, institutions and actions which produce, embody, renew and circulate the values of the society…’
A theoretical frame of reference informed by such generic understanding of culture, would allow to also re-think and incorporate its hierarchical and differential meanings, as identified by Bauman. Instead of looking at the expressive-symbolic everyday activities and experiences of – say – working class people, older women, people of culturally and linguistically different backgrounds or (other) marginal groups (or, relevant for this paper, of ‘problem gamblers’ or people with an addiction) as ‘coarse’, ‘primitive’, ‘problematic’, ‘non-adapted’ or ‘dependency creating’ or, indeed, as personalised ‘disorders’ generated by certain aspects of an ethnocentrically stereotyped culture, they could be re-conceptualised as culturally specific acts of resistance against the threat of the total loss of identity, due to experiences of domination and alienation. Culture, then, would become the totality of daily practices of (oppressed, alienated) individuals and groups, involving - in a deeply contradictory articulation – realisations of their own productive, creative and reproductive activities, which, at the same time, (can) signify their utter domination and the destruction of their livelihoods. Watching mindless TV programs, playing amateur theatre, getting drunk, losing all your money with gambling, making love, doing permaculture or being involved in volunteering, are thus only superficially opposite articulations of people’s deep-seated urge to remain a whole person (including their urge to stay connected with others like them!), in spite of all the pain inflicted in the course of a life time of daily experiences.

Paul Willis has captured this cultural reality close to perfection in his ‘Learning to Labour’ (1977); he stresses the necessity to insert of ‘cultural level’ between (the understanding of) the structural requirements of society and the individual experiences of (and reactions to) these requirements.

‘...a collective, shared sense of culture as presented in this book, with its specificity, with its active, always changeable nature (not culture as an external taxonomical device), presents in its complexity the possibility of some real limits, defeats, and ‘penetrations’ of what ‘structure’ might ideally require – in a word, resistance. It presents individual senses of choice, liberty, and the reversal of power and conventional status, as well as the possibility of a final bare settlement of some basic ‘conditions’ for the economy. But this is a fulfilling of the ‘conditions’; it must be remembered, in a way which also profoundly changes what was asked for. There is not space for all this inside the single oppressed head facing ‘structural determinism’. Without a notion of culture and its relative independence one is back with coercion and mystification, force or magic.’

Or, one may add, one is back with the coercive imposition of labels of medical categorisation, of assumed personality ‘disorder’ and the insult of psychotherapeutic morbidisation (or ‘twelve-step’ culpability) added to the injury of societal exclusion and alienation.

The relevance of all of this to the area of so-called ‘problem gambling’ should be obvious; marginalised people are more susceptible to problem gambling. Women who are socially isolated or who want to ‘escape’ from difficult life circumstances are drawn to EGM gambling. They often report being drawn to a place where they have a sense of belonging, are treated with what looks like respect and where they feel welcome. Men tend to gamble to be ‘winners’ and to have their sense of skill and competence validated (‘beating the machine!’).

At the same time, there is a lot of shame and stigma associated with problem gambling – consistently reported in all local qualitative research. This has implications for the design of ‘preventative’ advertising, which may unwittingly be counter-productive in that it increases stigma and thus prevents people from identifying that they may have a problem (however this is understood) or from seeking help or from calling on solidarity within their own cultural groups and relationships.
Research and intervention in gambling issues thus seems to have a lot to gain from adopting a cultural perspective in the above-understood sense. Whether that is possible in the context of mainstream social science and intervention remains to be seen; indeed, as Inglis (1994) points out

‘...the legislation of scientific formulae takes for granted the rightness of economisation, of reduction to the simplest, most graceful distillation possible in symbols of the classifiable facts of life. Only thus will theories yield explanations, and the natural world be ours to understand.

... Whether or not, as Richard Rorty suggests, science has pursued a mirage in its quest to find absolute reflections in nature of the way it puts things in symbols, the symbols of cultural theory and the weird antics of everyday life must remain embedded in one another, if abstraction and experience are to remain connected…

... Understanding actions-as-part-of-a-narrative in this way still sounds utterly unreliable to the helots of empiricism. They want fixed data even if they have to separate ‘findings’ from what they agree to be the subjective realm in which survey questionnaires are compiled…’

It should have become obvious that many interventions based on such understandings of the scientific investigation of social reality (including ‘empiricist’ culture), will revert to the apparent security and certainty of fixed definitions and to the authority of those who prefer the clean and distinctive (but often murderous) order of the ‘normal’ and the ‘abnormal’.

In the following sections we will explore alternative approaches to both person- and community oriented interventions in the (mental) health field and possible strategic applications in the area of (‘problem’) gambling.

Part Two: Community action that is focused on creating healthy communities

We have briefly described the need to account for both individual agency and social structure within a holistic and action-relevant frame of reference and we have pointed out that this is essential for adequate theorising about problem gambling, for guiding research and social inquiry and for forming the basis of strategies for social intervention and prevention.

The following sections will focus more on the latter – on approaches to social intervention that are informed by understandings of the experiences, values, meaning-systems and emerging and existent patterns of operating in the world by people in their everyday lives - particularly in this case, those that relate to gambling. While approaches to intervention and prevention need to be based on solid, consultative community research, complemented by research findings derived from a range of methods, an additional point needs to be reiterated, and perhaps re-framed, at this point – both research and intervention need to be underpinned by a theoretical base that gives recognition to the familiar life-worlds of people in their communities as an eminently legitimate ‘site’ of research and of intervention. While this would seem self-evident to some of us, it is still all too common to have reflections on this sphere dismissed as ‘anecdotal’ or as somehow inferior to ‘hard data’ – not the stuff of real research. In fact, if we are to recognise that individuals are affected by a continually forming and re-forming social structure and that society is made up of acting individuals responding to and working within their social context, then we must also recognise that the life-worlds of people are the very stuff that we need to study and work strategically with to address issues of health and well-being.

And of course we must never forget that the researchers, helping professionals and social support specialists, far from being separate from or above the world under study, are part of the very culture that we need to examine in our analysis of problem gambling and intervention.
In conducting community research to inform municipal health plans, both of us have drawn on extensive community consultations, in combination with quantitative demographic and health data as available. This qualitative, consultative research has formed an essential and core component of our investigations into and analysis of community health and well being in local areas. In tapping into the aspirations, experiences, values, meaning-systems and patterns of social interaction within the various overlapping layers of community, we have been able to work with local government in identifying webs of inter-relating health and social factors. Furthermore, we have been able to explore and identify the loci and meanings of the various issues within social systems and sub-systems and the most appropriate means and sites of intervention and prevention. In fact, community consultation has been and is essential in developing effective community health plans.

Importantly, this research accounts for local variation and particularity, while drawing on more broadly relevant pools of knowledge for analysis. It also allows for the social complexity that arises from our multiple affiliations and converging and overlapping subsystems, for example those relating to dominant culture, sub-culture, class and gender.

Thus, consultative, community based research that accords due legitimacy to the knowledge that people have about their own lives and social contexts is able to address issues where they are situated – thus potentially informing sites for support and community strengthening. These sites typically include the individual, the family, the community, institutions and organisations and the workplace.

Very much congruent with the theoretical approach that we have outlined, Municipal Health Plans are typically modeled on health charters developed by the World Health Organisation in recent times.

The 1986 Ottawa Charter outlines three health promotion strategies:

1. Advocacy for health to create the essential conditions for health
2. Enabling all people to achieve their full health potential
3. Mediating between different interests in the pursuit of health

Supporting these strategies are five priority action areas:

1. Building healthy public policy
2. Creating supportive environments
3. Strengthening community action
4. Partnerships for health; increasing community capacity and empowering individuals
5. Reorienting health services

Building on this, the Jakarta Declaration on ‘Leading Health Promotion into the 21st Century (1997), confirms the Ottawa Charter’s strategies and action. The Jakarta Declaration identifies five priorities:

1. Promoting social responsibility for health
2. Increasing investments for health development
3. Expanding partnerships for health promotion
4. Increasing community capacity and empowering the individual
5. Securing an infrastructure for health promotion

It is important to note the holistic approach to health that is central to this model. Health and health problems are most emphatically not something residing solely or primarily in
individual pathology. Health is a social issue. Furthermore, health is not conceptualised exclusively as something we only look at when it has become a problem – as some deficit to be corrected primarily or solely at the site of the individual. Good health is an attribute of communities and in facilitating the ‘spread’ of good health we recognize this, for example by increasing community capacity and strengthening community action.

However, a holistic public health approach pre-dates the WHO charters; it has its origins in the nineteenth century when health issues were starting to be addressed through public health campaigns, such as those tackling public hygiene and sanitation. Some of these were massive social and organisational feats – such as the establishment of London’s sewerage system across a multitude of local jurisdictions. Unfortunately, in a historical shift over the last 150 years, the link between social change, pressure for social reform and public health has been lost (see Kickbusch, below). This is largely attributable to the emergence and growing power of professionals and a belief in the potency of (professional) expertise in many areas determining or conditioning our lives and lifestyles.

Importantly, a public health approach not only views the individual within a social milieu and aims to foster healthy, strong and safe communities and workplaces. It looks at organisational and political behaviour and examines how public policy impinges on people living in their communities. The relevance of public policy in relation to problem gambling is obvious and is often hotly debated, for example, the growing dependence of governments on gambling revenue and the level of public accessibility to the form of gambling that is indisputably and mostly related to problem gambling, poker machine gambling.

Finally, we would like to finish our overview of the public health approach with a few points from a paper by Ilona Kickbusch (1989) aptly titled ‘Good Planets are Hard to Find’, which deals with public health as relating to environmental issues, and which would seem to be especially pertinent here.

The three points we will briefly cover include the complex causality inherent in health issues, the need for collaborative, inter-disciplinary work and a reiteration of the need to start from everyday settings in addressing health issues.

i) Firstly, causality is complex. Environmental risk patterns elude simple models of causality and intervention. They tend to be cumulative, present no clear causality and do not allow for simple, straightforward cause-effect interventions.

‘Bateson makes the point that present day science is not able to offer the necessary explanations of the world any more and proposes instead to work with the notion … of the ‘pattern that connects’. For an ecological theory of health a key step would lie in understanding health as a pattern of relations rather than as a quantitative outcome’ (Kickbusch, 1989:15).

ii) Secondly, new public health needs to lift itself from petty professionalisation squabbles over specialised fields of intervention to a generalist and policy-based concern for the health of populations. This is evidently very relevant to the area of problem gambling research and prevention whereby the various research and helping professionals share very little dialogue in addressing the complex social patterns, which lead to the generation of gambling related problems. With Kickbusch, we would highlight the need for interdisciplinary – or even better, transdisciplinary - work and a wide range of research on social health, social integration, social support and belonging which could allow us to see how a break down in the ecology of human interaction leads to serious health effects. With Kickbusch, we would also like to emphasise the need to look at a ‘science’ or study of health linked to feelings of belonging and social integration.
iii) Thirdly, through a quotation by Kickbusch (1989:17), we would like to reiterate the need to start from everyday settings where health or ill-health is generated and occurs:

‘An ecological approach moves health from an individual lifestyle/choice model to a broad gauged community issue. It starts its work with the basic and simple question: where is health created? The ecological answer – in the language of everyday – is: health is created where people live, love, work and play. It is created by human beings in their interactions with each other and with their physical environments. The consequence for a public strategy is to commence from settings of everyday life within which health is created (rather than with disease categories) and to begin with strengthening the health potential of respective settings.’

Which brings us to the third part of this discussion, attempting to locate person-oriented prevention work within the life-worlds of people.

Part Three: Person-oriented prevention that reinforces mediating structures in the form of families, communities and other living networks of people

We would like to give a brief overview of a model that goes some way towards re-establishing the importance and the legitimacy of the subjective realm within the areas of both social inquiry and community support and strengthening.

When Lloyd Williams, who founded and ran Melbourne’s Crown Casino for some years, remarked (after he had left his previous functions in the Corporation!) that the spread of pokies had done much damage to the ‘social fabric’ of Victoria, he conjured up an eminently appropriate metaphor for society or community. ‘Fabric’ refers to the (putative) existence of threads, woven and interconnected in such a way that the resulting cloth, textile, whatever, does what it is meant to do, that is, cover or support or ‘dress’ its content. ‘Fabric’ also refers to purposeful human activity; before coming to signify ‘making it up’, to ‘fabricate’ meant to produce something and ‘social’ fabric thus denotes conscious and unconscious collective human endeavour, interaction, relationships and connectedness, activities upon which our individual (as well as collective) survival depends.

There certainly has been a recent upsurge (notably in Victoria) of interest in and attention for community ‘building’ and for things to do with ‘social capital’, another concept often used instead of social fabric. Witness Eva Cox (1995:15), a chief proponent of this framework for research and intervention:

‘Social capital refers to the processes between people which establish networks, norms and social trust and facilitate co-ordination and co-operation for mutual benefit.’

Furthermore, healthy societies and communities are said to require minimum levels of ‘social capital’, involving active relationships between community members and the ability to:

- Work together collaboratively, resolve disputes and respect each other’s differences; and
- Trust those who are familiar and not so familiar – including mediating bodies such as organisations and governments.

Importantly, the concept of ‘social capital’ provides a positive counter-point to deficit models of problem identification and problem solving which fail to embrace the rich supportive
connections, strengths, aspirations, creative responses and visions of people in their communities and their every-day worlds (see also Coleman, 1990, often credited with the ‘invention’ of the notion of social capital – having picked it up from Bourdieu, 1980; Putnam, 1993, the main source for Cox’ elaboration of the concept and – more critically but positively, Trigilia, 2002; finally, with an attempt at sorting out the various usages, Foley and Edwards, 1999).

In relation to research on problem gambling, particularly research undertaken in the qualitative mode, it is probably not so surprising that it emerges in relationship to a variety of contemporary social malaises, many related to social isolation, boredom, loneliness, feelings of meaninglessness, a need to escape from difficult life circumstances, lack of a feeling of belonging, an unfulfilled need to be valued by others, etc. (as a matter of fact, much social research initially came about as a response to the massive dislocations occasioned by the effects of industrialisation and mass-production from the middle of the 19th century onwards).

Thus, a model such as provided by ‘social capital’ approaches would seem timely in increasing our understanding of the directions that we are taking and of the best means by which to support and promote what is most meaningful and valuable for us as individuals and collectively as a society.

Conclusion

In this paper we have argued for the need to broaden our conception of etiology and causality of problem gambling to include various social processes associated with the life-world of the individuals said to be inflicted by the ‘disorder’ of problem gambling. The life-world of individuals includes not only their immediate and proximate ‘environment’ but equally refers to such societal and ecological processes which condition the life-worlds of individuals and communities in a more mediated fashion, for example, political and economic processes and their multifarious interrelationships, often summarily referred to as ‘social structure’ or ‘society’. We have further argued that the insertion of a widened concept of culture, mediating between the micro-settings in which individuals live their daily lives and the macro structures referred to before, may help us to better ground understandings of problem gambling (as a ‘mental disorder’). It may also help us develop social approaches to prevention of problem gambling (and other addictions) and – indeed – lead to a precautionary approach in the planning of local provisions of leisure and recreation – rather than – in the words of previously mentioned Mr. Williams – practicing ‘harm minimisation’ when the ‘horse has bolted’, the horse, that is, of the uncontrolled spread of pokies into our communities.
References


Challenging some sacred cows in problem gambling

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Abstract
The recently completed New Zealand Gaming Survey (NZGS), which included a two-phase ‘replication’ survey as well as longitudinal and prison studies, produced some unexpected and controversial findings that have potentially important implications for future research, public policy and professional practice. These findings challenge the notion that the prevalence of problem gambling invariably increases with rising per capita expenditure, that problem gambling is a chronic, relapsing disorder, and that a return to moderate or controlled gambling is a rare outcome for problem gamblers. The validity of these challenges to conventional reality is critically assessed by a consideration of their consistency with other findings from the NZGS and international literature.

Introduction
Recent research by myself and colleagues has questioned the validity of three widely held beliefs, namely that:
• Problem gambling prevalence increases with greater gambling availability
• Problem gambling is a chronic, relapsing disorder
• A return to moderate or controlled gambling is a rare outcome for problem gamblers.

The intense negative reaction from some colleagues to the suggestion that these beliefs may not be justified implies that they are more akin to religious dogma than to scientific hypotheses. If so, their defenders are closer to ideologues and zealots than open-minded scholars.

This paper presents information pertaining to these three beliefs or assertions. Before doing so, it may be timely to reflect briefly on scientific logic. Central to this enterprise is the formation and refutation of hypotheses. Hypotheses are conjectures based on theory and prior belief that may also have been informed by data gathered using varying degrees of rigour.

Hypotheses are never ‘proved’ in an ultimate or fundamental sense. Rather, they are exposed to the risk of falsification by the systematic collection of data according to rules and conventions. The more often that hypotheses have been exposed to the risk of falsification
using strong research designs and ‘survived’ (been corroborated), the more confident we can be about their adequacy. Although a rigorously corroborated hypothesis may not be ‘true’, most reasonable people would act on the assumption that it is for the purpose of formulating policy and going about their lives.

While no research finding or accumulation of findings can ever ‘prove’ a given hypothesis, contradictory findings from a single well-designed study can refute it. Many major ‘breakthroughs’ and advances in science come when theoretical expectations are contradicted by data – when your findings hit you in the face and pose new questions.

**Hypothesis 1: The prevalence of problem gambling increases with greater availability of expenditure on gambling**

During the past 15 years gambling has been a major growth industry in many parts of the world including Australia and New Zealand. This expansion has been associated with increased adult per capita expenditure on gambling and increased involvement on the part of sectors of the population that previously had little involvement with gambling (‘normalisation’, ‘feminisation’).

It has been widely assumed, and often asserted, that increases in availability, involvement and expenditure have resulted in a rise in the prevalence of problem gambling, previously considered a rare disorder. The presenter, for example, has referred to pathological gambling as a “sunrise disorder.”

Findings consistent with the hypothesis that the prevalence of problem gambling has increased with greater availability of gambling include:

- Problem gamblers have been demonstrated to have high levels of participation in and expenditure on forms of gambling that evidenced the most growth during the past decade, e.g. video gaming machines and casino gaming. In New Zealand and Australia, this is evident in both clinical presentation and general population survey data (Abbott, 2001).

- Some studies have found higher problem gambling prevalence in regions with ready access to casinos (e.g. United States and New Zealand national surveys). The 1991 New Zealand national survey found no difference in problem gambling prevalence between major centres when other factors associated with problem gambling, e.g. ethnicity and age, were controlled statistically. (Abbott & Volberg, 1991; 1996). In the 1999 national survey, following the introduction of casinos to Auckland and Christchurch, these centres had higher prevalence rates than Wellington and other parts of the country (Abbott & Volberg, 2000).

- There has been a steady rise in the number of people consulting problem gambling services during the past decade. (Abbott, 2001).

- Higher prevalence rates (on average) have been found in state and provincial North American general population surveys since the mid 1990s than in earlier surveys (Abbott & Volberg, 1999).

- Higher adult population prevalence rates have been found in countries with high levels of gambling participation and expenditure, e.g. Australia versus New Zealand, Sweden, United Kingdom (Abbott, 2001).
• The two Australian states with the lowest per capita gambling expenditure (Tas and WA) have substantially lower prevalence rates than the states and territories with higher expenditure (see Figure 1).

• Prevalence rates and clinical presentation rates have increased disproportionately in some sectors of the population that have significantly increased their gambling participation, e.g. women in New Zealand, Australia and some North American jurisdictions (Abbott & Volberg, 2000; Productivity Commission, 1999).

• Some studies find higher lifetime prevalence rates among teenagers and young adults relative to older adults, e.g. New Zealand 1991 national survey, 1998 Swedish national survey (Abbott & Volberg, 1996; Volberg, Abbott, Rönnberg, & Munck, 2001).

Findings inconsistent with the increased availability-prevalence hypothesis include:

• North American sub-national general population replication surveys are almost equally divided between those finding higher and lower prevalence rates at follow-up (Abbott & Volberg, 1999; Volberg, 2001).

• The 1996 and 1999 New Zealand national surveys obtained lower prevalence rates than the earlier 1991 national survey.

• Recent Australian state/territories surveys and the Productivity Commission national survey obtained substantially lower prevalence rates than the 1991 ‘four cities’ survey (Productivity Commission, 1999).

• The six most recent replication surveys (5 North American; 1 New Zealand) found reduced percentages of weekly or more frequent gamblers despite increases in per capita gambling expenditure since their respective baseline surveys. (Abbott, 2001; Volberg, 2001).

• A number of the six surveys just referred to obtained lower problem gambling prevalence estimates than their respective baseline surveys. Those with reductions were in jurisdictions that had developed comprehensive problem gambling services – those with increases had not.

• The interpretation of higher lifetime prevalence among young people as an indication of increasing prevalence has been called into question by findings from the first prospective general population survey of problem gamblers (Abbott, Williams & Volberg, 1999). Specifically, many people who scored as lifetime problem gamblers in 1991 did not score as problem gamblers when assessed using the same lifetime measure seven years later. Thus, older adults may have lower prevalence because they significantly under-report past problems.

• The first prospective general population survey of problem gamblers (Abbott, Williams, & Volberg, 1999) found high rates of problem remission, especially among problem gamblers who favoured gaming machines. This suggests ‘outflow’ from the ‘stock’ of problem gamblers in the population may be faster than previously considered (refer to Figure 2).

• The recent New Zealand national prevalence survey found that some previously high-risk groups, e.g. unemployed people, beneficiaries, young adults and males, are no longer in this category. The recent Australian national survey (Productivity Commission, 1999) found very little difference in prevalence between
sociodemographic groups. It is hypothesised that during periods of rapid gambling expansion, some groups with previously little involvement get drawn into gambling. Initially they have ‘bimodal’ patterns of participation and are at high risk for problem gambling. It is further hypothesised that in ‘mature’ gambling markets, bimodal patterns normalise and prevalence reduces.

- Data from the recent New Zealand and Australian national prevalence surveys suggest that (a) problem gambling prevalence initially increases with rising gambling availability and (b) a point is reached where the relationship breaks down and increased availability no longer generates higher prevalence (refer to Figure 1).

Hypothesis 2: Pathological gambling is a chronic or chronically relapsing (“persistent and recurrent”) disorder

In contrast to the great majority of other mental disorders, pathological gambling does not require the demonstration that diagnostic criteria occur within a specified or current timeframe. In contrast to alcohol and other drug dependencies/misuse diagnoses, there is no provision for an “in remission” diagnosis.

The foregoing is consistent with the notion that problem gambling is a chronic or chronically relapsing disorder.

The original (and current) ICD and DSM conceptualisation of pathological gambling was largely based on retrospective accounts of male GA members who had developed their problems in the 1950s and 1960s. It was also strongly influenced by AA ideology – “once an alcoholic always an alcoholic.”

Relevant research findings and related considerations include:

- The original SOGS, consistent with DSM conceptualisation, only provided a lifetime assessment of pathological gambling. Abbott and Volberg (1991) adapted the SOGS to yield both lifetime and current measures (SOGS-R). Since 1991, most prevalence surveys conducted worldwide have used the SOGS-R or SOGS-R variants. These surveys have typically found that current (past 6 or 12 month) prevalence estimates are a half to a third of lifetime estimates. In the case of the recent New Zealand national survey, 55% of lifetime probable pathological and problem gamblers were not assessed as experiencing problems of this severity during the past six months.

- Thus, the New Zealand national survey data suggest that over half of people who had experienced gambling problems at some stage during their lives did not experience problems currently. However, the NZGS longitudinal survey found that only about a quarter of 1991 ‘lifetime’ probable pathological gamblers scored as lifetime probable pathological gamblers when re-assessed seven years later (Abbott, Williams & Volberg, 1999). This implies that many people with past gambling problems, especially people who do not experience problems currently, either forget or elect not to report past problems. This further suggests that:
  (a) All lifetime prevalence estimates from surveys conducted to date are highly conservative, and
  (b) The difference between lifetime and current rates significantly underestimates problem reduction over time.

- To date, only a small number of studies have followed problem gamblers who have presented for treatment prospectively. They have found variable outcomes some years later, with varying percentages currently non-problematic and
‘abstinent’, currently non-problematic and gambling, and ‘relapsed’ (Abbott, Williams & Volberg, 1999).

- The NZGS includes the only prospective study of problem gamblers and non-problem gamblers identified from a random general population sample. This study found that:
  (a) Of the people assessed as currently being probable pathological gamblers in 1991, approximately a quarter were current probable pathological gamblers and a third were current problem gamblers when re-assessed seven years later.
  (b) Of the people assessed as current problem gamblers in 1991, nine percent were in this category seven years later, 14% were current probable pathological gamblers and the remainder were non-problematic (see Figure 2).

- The foregoing and other NZGS findings indicate that, in the general population, problem recovery is not atypical and that problem gambling is not invariably chronic or chronically relapsing in nature. However, increased problem severity, co-morbid alcohol problems and a preference for certain forms of gambling, e.g. track betting, were found to be associated with greater chronicity. In New Zealand, male gender and non-European ethnicity also appear to be prognostic for chronicity.

- In the NZGS male and female prison studies, the difference between ‘lifetime’ and current prevalence rates was much less than found in general population studies (Abbott, & McKenna, 2000; Abbott, McKenna & Giles, 2000). Most problem gamblers in these studies had very high scores on the SOGS-R and co-morbid problems with alcohol and other substance – i.e., they more resembled treatment populations.

- It is likely that DSM notions of chronicity and relapse proneness are more applicable to the minority of problem gamblers who present for treatment than to problem gamblers generally.

Hypothesis 3: A return to moderate or controlled gambling is a rare outcome for problem gamblers

The matter of whether or not people with serious alcohol problems can subsequently sustain problem free drinking patterns and the desirability of ‘controlled’ drinking as a treatment goal have been extensively studied and debated (Abbott, 1979; 2001; Volberg, 1995).

Much less information is available on these issues in relation to problem gambling.

The NZGS provides relevant retrospective and prospective data. Specifically:
  (a) Of the self-identified problem gamblers who reported (retrospectively) having had problem-free or largely problem-free periods of six months or more, only half said they had stopped gambling during these times.
  (b) The 45% of 1991 current probable pathological gamblers who were not assessed as currently problematic seven years later were evenly divided between infrequent or non-gamblers, regular non-continuous (mainly Lotto) gambler and regular continuous gamblers.
  (c) Over half of the 78% of 1991 current problem gamblers who were not currently problematic seven years later were regular non-continuous gamblers at that time. The remainder were evenly divided between regular continuous gamblers and infrequent or non-gamblers.
These findings are consistent with the view that significant numbers of problem gamblers, especially those with less severe problems, do return to non-problem gambling. However, they only partly address the question of whether or not non-problematic gambling is sustainable for people who have experienced gambling problems in the past.

Longitudinal studies of clinical and general population samples of problem gamblers are required to fully address this question. However, information pertaining to one sub-group of problem gamblers in the NZGS longitudinal survey is relevant. Apart from people who currently had gambling problems in 1991, there were others who had experienced problems in the past but not during the six months prior to their assessment in 1991. In 1991, somewhat similar numbers were represented in each of the three current non-problem groups, namely regular continuous gamblers, regular non-continuous gamblers and infrequent or non-gamblers. Seven years later the majority of these people who had experienced problems prior to 1991 continued gambling and very few were found to be problematic currently (see Figure 2).

**Conclusion**

The findings outlined seriously challenge the universal validity of the three ‘sacred cows’ of problem gambling. Further detail and discussion of the research presented is provided in the reports on the NZGS. As in many fields, careful examination reveals shades of grey where many people see only black and white. It is anticipated that future research will further delineate the circumstances in which each of the hypothesised relationships do and do not occur.

It is left to the reader to consider the various implications of this paper for policy and practice.
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1A: Average Gaming Machine Expenditure in Relation to Gaming Machines per 1000 Adults

1B: Problem Gamblers per 1000 Adults and the Number of Gaming Machines per 1000 Adults by Jurisdiction

1C: Problem Gamblers per 1000 Adults and Average Expenditure on Gaming Machines by Jurisdiction

1D: Problem Gamblers per 1000 Adults and Average Expenditure on Major Forms of Continuous Gambling by Jurisdiction

Figure 1: Gaming Machine Numbers and Expenditure and Continuous Gambling Expenditure in Relation to Problem Gambling Prevalence in Australasian Jurisdictions
Figure 2: 1998 Gambling and Problem Gambling Status for Participants in each of the Current 1991 Gambling/Problem Gambling Groups
References


Sorting things out: The desegregation of gambling media and the emergence of a single form of gambling

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Introduction

The simultaneous publication of government reviews of gambling in the United Kingdom and New Zealand provides an opportunity to raise a number of issues concerning the similarities and differences in local developments in gambling. These issues turn on the disputed ‘normalisation’ of gambling.

Normalisation

Normalisation is an argument which has accompanied and reinforced developments in gambling media involving firstly the state promotion of lotteries, but more significantly the computerisation of gaming machines and the developments in Internet wagering and Internet gaming. Simultaneously, it is clear that these developments in the diffusion of gambling or, to put it another way, gambling as mass consumption, turn on greater abilities on the part of states to regulate and control this mobile good. Claims for normalisation and state control can therefore be said to reinforce one another, albeit in different ways in different countries. However, just as normalisation is subject to dispute, state control is never total.

It is recognised in both societies that control centres on developments in surveillance and the operation of state-sanctioned established operators of casino gaming and wagering. Such control necessitates blocking the more ‘difficult’ areas of: (i) community gambling in pubs and clubs operating gaming machines and; (ii) ‘uncontrolled’ overseas suppliers who now mobilise the Internet (Sinclair, 2001). Significantly, the British and New Zealand reviews differ most on how to handle these difficult areas, especially the suppliers of virtual gambling.

The New Zealand Gaming Review is presented as making (or returning) gambling for the community (Markland, 2001).

The four key themes underpinning the Government’s decisions are:

• “Gambling will be primarily used to raise funds for the community
• The harm cause by gambling will be minimized
• There will be local involvement in decisions about the availability in communities of the more risky forms of gambling
• There will be controls on the growth of gambling” (Department of Internal Affairs, 2001: 1)

Most notably the New Zealand review: (i) extends the monopolies of existing operators in the areas of casinos and wagering; and (ii) further limits community gambling (Curtis and Wilson, 2001b). The new developments here are that the state-owned Totalisator Agency Board (TAB) is given approval (albeit retroactively) for gaming machines and Internet wagering. At the same time, community gambling through gaming machines in chartered clubs and those owned by charitable trusts in pubs continues to be disciplined and disadvantaged vis a vis casinos and the TAB.
Over the last decade the combination of gaming machines with wagering (through agencies of the TAB) in clubs and pubs in New Zealand has resulted in them becoming entertainment complexes or suburban casinos (Austrin, 1998). The disciplining of these suburban casinos involves: (i) the continued limitation of prizes and marketing; (ii) a reduction in the number of gaming machines allowed on new sites (from 18 to 9); (iii) the introduction of a community veto in the siting of gaming machines, and; (iv) the establishment of new surveillance regimes over the gaming machine operations in clubs and pubs.

By contrast, the British *Gambling Review Report* recommendations “are designed:

- To simplify the regulation of gambling
- To extend choice for adult gamblers

While seeking to ensure that:

- Permitted forms of gambling are crime-free, and conducted in accordance with regulation and honest
- Players know what to expect, are confident they will get it and are not exploited
- There is protection for children and vulnerable persons” (Department for Culture, Media and Sport, 2001:2).

This extension of choice involves: (i) giving both gaming machines and virtual gambling (Internet wagering and Internet gaming) to existing operators and; (ii) continues a tradition of blocking the large-scale operation of gaming machines outside of these operators.

What the British review suggests as novel is that: (i) casinos be given unlimited gaming machines and (ii) the established operators be permitted virtual gambling.

Clearly there are many differences between the two jurisdictions. The most significant of these centres is the status of public gaming and the operation of gaming machines. It should be noted that in Britain there is no equivalent of the *de facto* suburban casino found in clubs or pubs around New Zealand, largely because ‘members clubs’ were disbarred from gaming machines. Gaming machines in clubs and pubs in New Zealand are ostensibly run for charitable purposes that are approved by the New Zealand Department of Internal Affairs. Most clubs in New Zealand (including Workingmen’s Clubs, Returned Servicemen’s Clubs and sports clubs) depend on these gaming revenues.

However, regardless of the differences between the two jurisdictions, there are shared processes at play in the diffusion of gambling in New Zealand and the United Kingdom. Firstly, the desegregation of gambling media, resulting in homogenised venues (Miers, 1996). Secondly, the emergence of a single form of gambling media, which takes the form of random number generation (Austrin and Curtis, 1999).

**The desegregation of gambling media: The politics of licensing**

The desegregation of gambling media is a process that makes possible single ‘one-stop’ venues in which all gambling products are available to consumers. It involves the combination of different gambling media in a single site (for example, combinations of gaming machines, bookmaking, sports-betting and keno).

Miers points to this development in the United Kingdom:

“This homogenisation of gambling media in a single venue is a significant departure from the traditional view that different types of gambling media ought to be kept apart, where their structural characteristics are such that they offer different (and more effective) incentives to play and to repeat play” (1996: 289).
Miers reference was to the changes occurring to British betting shops but he notes that the long run outcome of this development will involve the development of gambling centres offering the entire range of gambling products. The reference here, of course, is to the Las Vegas style casino but his point is that such venues typically exist for reasons diametrically opposed to those that have traditionally informed the UK Home Office policy. The reasons identified are those of stimulating rather than doing no more than responding to demand. In this view desegregation shifts gambling policy to what he has elsewhere referred to as a revenue generation regime (Miers, 1996).

The process of desegregation which Miers forecasts involves a range of fully commercial operators. These are established operators, who provide gambling in multiple venues across Britain. They include firms like the Hilton Group, which has interests in casinos, the bookmakers Ladbrokes, as well as a joint venture to operate interactive betting services on BSkyB’s digital sports channels. As a result of desegregation, these established operators would be increasingly able to locate gambling media in venues in accordance with commercial pressures, most notably those of marketing.

New Zealand has moved some way toward desegregation of gambling albeit largely to sustain public gaming in which revenues are used for ‘authorised’ purposes (Markland, 2001). Thus, the state-owned TAB has been able to site its agencies alongside gaming machines owned by charitable trusts in pubs and in chartered and sports clubs since 1993. This location of bookmaking and sports betting (since 1996) has been important features of the de facto suburban casinos. At the same time, casinos in New Zealand already take the form of large-scale commercial gambling venues (combining machine gaming and table gaming on a 12.5:1 ratio).

The New Zealand Gaming Review is explicit about furthering desegregation but insofar as casinos, clubs and pubs already operate gaming machines this involves fresh alliances between commercial and public operators. Notably the Gaming Review suggests that the TAB will be able to offer bookmaking and sports betting in New Zealand casinos as well as operate its own gaming machines (Department of Internal Affairs, 2001).

As noted, in New Zealand the desegregation of gambling is used to secure public gambling (which is putatively non-commercial) in the form of the TAB, chartered clubs and the charitable trusts running gaming machines in pubs. However, this strategy of (re)emphasizing the community building aspect of gambling is both contested and uneven (Curtis and Wilson, 2001a 2001b). Arguably, the Gaming Review and the ‘Responsible Gambling Bill’ it proposes is a reversal of recent policies resulting in the Casino Control Act (1990) and the subsequent licensing of casinos. Certainly there has been considerable pressure from state-owned operators, the Lotteries Commission and TAB, for such a switch. As the New Zealand Lotteries Commission noted some years ago in its document Responsible Gaming: A Commentary:

“The introduction of casinos for private gain was a major aberration in the general pattern of the New Zealand gambling and gaming industry. It should remain as an aberration… the contagion should not be allowed to spread’ (Lotteries Commission, 1997: 15).

Nevertheless the New Zealand review is as much about securing existing arrangements as it is promoting public gambling. While the review states that no further casinos will be licensed and abolishes the Casino Control Authority, this acts simultaneously to secure the monopoly arrangements of existing casinos. Indeed, the share prices of Sky City casino rocketed in the wake of the Gaming Review. Similarly, although the TAB has been allowed access to Internet wagering, gaming machines and casinos, the other non-commercial operators have had their
aspirations checked: the Lotteries Commission is denied the Internet or gaming machines; and the clubs and pubs are further limited in their use of gaming machines.

The New Zealand situation reveals the desegregation of gambling media as a politics of licensing, wherein the state allocates specific gambling franchises to operators. It is these state franchising decisions that determines whether or not, in Miers’ words, different types of media are kept apart.

Perhaps more interesting than the differences in the politics of licensing are its commonalities, realized as desegregation. Thus, critical differences between the United Kingdom and New Zealand in ownership of gambling, and arguably in the motivations of state actors, do not offset segregation or joint arrangements between operators of different kinds of gambling media. Furthermore, this is already the case in Australia. An explanation for this parallelism is found in the transformation of gambling media towards a form of random number generation.

**The emergence of a single form of gambling media**

The desegregation of gambling media has an important technical aspect in that it involves computerisation and software to run (and survey) the varied forms of gambling. Much of this technical development centres on the capacity for networking in order to secure: (i) electronic surveillance; (ii) linked jackpots; (iii) real time betting and wagering; and most importantly (iv) continuous gambling. Examples of such networking currently exist for gaming machines, national lotteries, bingo, keno and off-track betting. The process of desegregation is both facilitated by and furthers these aspects of networking.

Significantly, networking is important by allowing a variety of gambling media to be located at a single venue. At the same time, this diversity of gambling media, in effect of games that can be played in one location, is matched by the movement of all these games towards the logic of random number generation. By this it is meant that all forms of gambling increasingly takes the form of the lottery.

The clearest examples of this movement are the national lotteries, keno and gaming machines. In these examples whether or not a player has purchased a winning ticket is determined by a random combination of numbers. The national lottery in Britain and New Zealand features the draw as the weekly highlight of their marketing campaigns.

Keno offers far greater possibilities for continuous gambling insofar as the numbers for each game can be generated more or less continuously. The limiting factors in keno are the speed at which players can make bets and marketing decisions by the operator (eg. most casinos use keno to sustain gambling during players ‘time out’ periods). Gaming machines combine near instantaneous play and determination. They approximate continuous gambling. Other examples of the movement to the logic of the lottery in gambling include: (i) wagering on track racing and sports. In these cases the logic is worked through with changes to the betting options. For example, ‘Pick Six’ and point spreads; and (ii) Casino gambling. Most notable here are changes to the rules of Blackjack and the introduction of continuous shuffling.

The logic of the lottery, the determination of win and loss by random elements, is significant in the much commented upon shift from gambling to gaming. Gaming can be said to be the most important part of the argument about the normalisation of gambling. Gaming is the mass entertainment form of gambling. Gambling increasingly looks like a craft model.

The shift towards the logic of lotteries is the common condition in New Zealand and Britain and globally. It secures the emergence of gambling as mass entertainment. In the British report this is made explicit – in the facilitation of resort casinos for development purposes. In the New Zealand report it is checked and subordinated to ‘community’ gaming.
In the British report the argument for normalisation is advanced by its commercialisation. The New Zealand report proposes a more limited form of normalisation in which gambling is diffused through community forms.

**Controlling the difficult areas of gambling**

While it has been proposed that gambling has been globalised (McMillen, 1996) it remains important to locate local differences in order to understand the continuing diversity and controversies over developments in gambling. The argument of this paper is that while desegregation of gambling media has and will secure large-scale casinos / gaming machine venues subject to state control in both societies. By contrast the way in which desegregation takes place outside of these sites has been and will remain different. This is true of both gaming machines and virtual gaming. Further, it is these areas that drive debate and the continuing attempts by the state to regulate to secure both surveillance and revenue and protection of the vulnerable (e.g. problem gamblers).

Gaming machines: In Britain gaming machines remain disbarred outside of casinos. In New Zealand -where gaming machines in clubs and pubs enjoy the largest share of gambling expenditure- the state has moved to introduce electronic surveillance while denying operators the capacity to network machines.

Virtual gambling: In Britain the state has moved to licensed virtual gaming in order to seek tax revenues currently lost to Caribbean and extra-territorial operators. In New Zealand the state has refused to license virtual gaming (but has allowed the TAB virtual wagering). This is an unsustainable position.

**Conclusion: The medium is the message**

In the field of gambling all government action is a response to developments within society – they follow rather than lead (Austrin, 2001).

There are timing differences in terms of implementation of wagering and casinos in the two jurisdictions but in both cases it was the introduction of state organised lotteries which disturbed existing segregation of real time gambling and provoked changes directed towards desegregating other forms of gambling. Further, there is a relationship between the mass consumption of gaming – through linked random number generators or their simulacra- and the state control of the operators of these forms of gaming. In short, as gambling becomes more decentralized then more centralized gaming commissions will come into play. In both jurisdictions desegregation and a single form of gambling are the basis for such single commissions. At the same time, the reviews are provisional documents that open out new opportunities for operators but do not resolve on going developments with respect to virtual gaming. The British marks a bigger break in this direction but it remains to be seen.

In an absolute sense the ongoing shift from gambling to gaming is a confirmation of McLuhan's most popularly quoted phrase 'the medium is the message'. This describes how the technology itself--and not just the way it is used--determines the essence of the thing that shapes our lives (McLuhan, 1964: 7). In the case of gambling it is the technology of the networked random number generator that is decisive.
References


Gambling litigation: The last word in loss-chasing

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Abstract
Legal culture is dominated by a little-recognised form of gambling: litigation. Lawyers themselves might be seen as gambling providers. And the worlds of gambling and law are beginning to merge. Gamblers are now suing gambling providers. This might be simply a reflection of a litigation-crazy society, or it may be the ultimate form of loss-chasing. The author shares his first-hand knowledge of a number of cases where gamblers have sued, sometimes with success. Consideration is given to the uncomfortable position of gambling in the legal world. Do gambling providers owe a duty of care to their patrons, and if so, what is the extent of that duty?

Is the threat of civil litigation an incentive for responsible conduct of gambling (RCG)?

The Productivity Commission (1999) considered the possibility that the threat of civil litigation might be an incentive for venues to act responsibly saying:

“The threat of legal action (under common law) by problem gamblers against venues which fail to ensure a sufficiently safe environment for gambling provides, in theory, incentives for venues to act responsibly. In general terms, under the common law a gambling venue has a duty of care to avoid foreseeable harm. If it provides inducements to gamble, serves alcohol to a gambler who has already consumed too much, or provides cash advances to gamble, then that might constitute a breach (Stoljar, 1999). To be found negligent, the venue would have to fail to act in the way that a reasonable person would. The court could then award damages upon proof of adverse impacts.”

However the Productivity Commission (1999) did not consider that the common law provided an adequate incentive for venues to implement harm minimisation measures. It suggested that the government “specify in statute a duty of care by gambling providers that they take all reasonable and practical steps to protect their customers from gambling problems.” (at 16.45). The Productivity Commission envisaged that when faced with a statutory duty of care, the gambling industry would develop its own risk minimisation strategies. A number of industry groups did release voluntary codes of practice in anticipation of, or response to the Productivity Commission findings, but these were largely notable for their lack of substance.
No government has followed the statutory duty of care path. Instead governments have imposed a specific set of RCG requirements by way of legislation and left it up to the courts to decide the civil consequences of breach of such requirements.

The RCG requirements for the Star City casino are very detailed, so much so that the casino in Preston’s case (1999) argued that it had such a detailed and prescriptive regulatory regime that there was no room left for common law or other civil claims. This was rejected by the Wood CJ, who held that even the strictest set of controls did not automatically exclude civil claims. Such an approach was subsequently justified by the NSW Casino Control Authority (2000), providing evidence of a number of irresponsible practices were occurring in Star City’s Endeavour Room, such as the provision of excessive free alcohol.

Case study One
Reynolds v Katoomba RSL All Services Club (2001)
The facts
During 1992 and 1993, Reynolds was a member of the club and attended the club frequently to gamble on the club’s poker machines. He disclosed a gambling problem to the Secretary Manager saying:

“I have a problem. I can’t control myself. Once I start I can’t stop. Please don’t cash my cheques or give me credit to start me off, even if I beg you.”

These cheques mostly came from a milk-run business in which Reynolds was in partnership with his father and were drawn on the partnership account or made payable to the partnership by milk-run customers and signed over to the club by Reynolds.

His father had a number of conversations with the Secretary Manager in which he informed the Secretary Manager that Reynolds had a major gambling problem and was attending Gamblers Anonymous. The father asked the Secretary Manager not to cash any cheques for him at the club. The Secretary Manager initially agreed, but later refused, saying “I can’t do it. There is no way I can stop him. He is over 21.” The Secretary Manager also refused to bar him from the club telling Reynolds senior “I can’t bar him because he hasn’t done anything wrong.”

Reynolds claimed the club breached its duty of care and sought an order that the club repay him $56,968.83.

The judgment
The NSW Court of Appeal held that despite its knowledge of Reynold’s gambling problem, the club did not owe him a duty of care. Although Reynolds had been diagnosed as a pathological gambler, the court did not consider him to be ‘vulnerable’ in a legal sense. He could have chosen to stay away from the club and refrained from asking the club to cash his cheques. He could have resigned his membership at any time. Spigelman CJ considered the risk of loss similar to the risk of injury of a participant in sport, saying, “The only way to avoid risk of injury is not to play.” (at para 49).

The judges emphasised that a problem gambler has the primary responsibility for regaining control of him or herself. They recognised that financially compensating a gambler for his or her losses would be counterproductive, in that it would be a reward for irresponsible behaviour.
Although the Court held that the club had no duty of care in this case, the Court said that there might be a duty of care in an extraordinary case.

Little that the club could have done

The court held that the only thing the club could have done was to refrain from cashing cheques for Reynolds. The club had not behaved illegally or unconscionably towards him. There was no misleading or deceptive conduct.

Case Study Two
American Express International v Famularo (2001)

The facts

The case arose out of events in 1997, before most RCG legislation commenced. The manager of O’Malley’s Hotel at Kings Cross had installed an EFTPOS terminal in its “Las Vegas Lounge”. There was nothing wrong with that, nor with the patron taking out money from his bank account and gambling it.

Unfortunately the hotel went further. It allowed the patron, Simon Famularo, to obtain cash advances on his American Express charge card, which was not permitted by American Express. The manager told Famularo that providing cash advances on his AMEX card was “not a problem”.

The hotel knew Famularo had a gambling problem. He told the manager that he had been to court for breaching a casino self-exclusion order. A staff member remembered saying to him “Simon, you are mad, absolutely mad, gambling the way you do.”

Famularo spent many hours at the hotel, drinking excessively, obtaining cash advances on his AMEX card and losing it on the hotel’s PubTab and machines. In one week alone there were 42 advances totalling $15,250. When his money ran out, AMEX sued him for the debt, and he sued the hotel.

The judgment

Staff knew Famularo had a gambling problem and that he was often heavily affected by alcohol. Sometimes the manager would give him free alcoholic drinks when he had been losing heavily. But it was the cash advances that were the deciding factor. The judge held that the hotel acted unconscionably when the manager misrepresented that the illegal cash advances were “not a problem”. That was a breach of s.51AB Trade Practices Act 1974 and entitled Famularo to compensation for his loss.

The hotel was ordered to pay $64,400 compensation to Famularo. Famularo was ordered to pay American Express the debt he owed it, which was a similar amount.

Although unusual, Famularo’s case is based on established legal principles according to Stefano & Younes, (2001).

Case Study Three
Preston v Star City (1999)

This judgment is an interlocutory decision of the NSW Supreme Court. The case has not been finally decided. Preston’s case includes claims for negligence and breach of statutory duty. He alleges various inducements such promises that the casino would give him business if he remained a high roller.
Wood CJ at Common Law considered that a common law duty of care could exist and said:

“...The precise limits of the duty of care owed in the present case, and of any breach, are likely to depend upon the facts proved- most particularly upon the extent to which the defendant had knowledge of any propensity on the part of the plaintiff to be a problem gambler, and upon the extent to which it sought to take advantage of him. Additionally, it is likely that there would be a reference to matters such as industry practice, economic consequences, practicability and a variety of social and policy factors. Although it may well be that the duty of care would be confined to problem gamblers, and not one owed to gamblers at large, that does not affect this case, since it is the circumstance of the plaintiff being a problem gambler and one who was susceptible to alcohol, that is at the heart of his action.”

One allegation in Preston’s case is that the casino supplied him with free alcohol with the intention of getting him to gamble more.

Wood CJ helpfully suggested the boundaries that might apply:

“It is certainly arguable that any duty of care in this context would not go so far as to require the warning off or the declining of business of high rollers or gamblers who regularly lose, or the declining of the business of high rollers or gamblers who regularly lose, or denying them the facilities available to gamblers at large, including those permitted under the legislation and regulations. It may also not go so far as preventing the offer of a limited or reasonable range of inducements and complimentary services. At a minimum, however, I am of the view that it is strongly arguable that it would extend to a prohibition on the provision of further liquor to a problem gambler, who is seen to be intoxicated, or to be behaving in a manner that is obviously totally rash, as well as to the ‘spiking’ or ‘switching’ of his drinks. Equally arguable, in my view, is its extension to the provision of significant credit facilities or excessive encouragement through incentives, of a person who has specifically asked to be barred or to go beyond a limit that he has asked the casino to set.

So restricted, this would not prevent casinos from dealing with high rollers, or even with gamblers who are known to have a strong gambling habit, so long as those dealings are fair and so long as those gamblers are not unduly or improperly pressured or encouraged into gambling in a way that is obviously reckless and potentially destructive of themselves and their families.”
(para 132-133)

**Alcohol and tobacco cases**
There have been significant developments in the duty of care in relation to alcohol and smoking in recent years.

**Case Study**
**Johns v Cosgrove & Ors (1997)**

Johns, a regular patron of the Chevron Hotel in Surfers Paradise, left the hotel in a heavily intoxicated state, and was standing at the bus stop across the road when he lost his balance and lurched out onto the road in front of a car. As a result of being hit by the car he suffered brain damage and other injuries.
The Queensland Supreme Court judge split liability for the damage in 3 ways:

1. Johns was 45% liable for his own injuries because he deliberately became heavily intoxicated;
2. The car driver was 30% liable because she saw Johns swaying and holding onto the bus-stop signpost with both hands and recognised that he was drunk. She failed to slow down and was therefore unable to swerve or brake to avoid hitting him;
3. The Chevron Hotel was 25% liable because the staff continued to serve him alcohol until he was heavily intoxicated, with a blood alcohol reading of 0.332%. In addition, the bar staff knew that he would have to cross a busy highway to get to the bus stop.

The judge said:

“…knowing that an intoxicated person would place himself into a position of danger on leaving the hotel, a publican cannot continue to supply him with the means of greater intoxication without regard to the danger to which he is thereby contributing.”

In Cole v Lawrence (2001), the South Tweed Heads Rugby League Football Club owed a duty of care to a patron in relation to the serving of alcohol. Justice Hulme noted that the provision of free Spumante to patrons at a Sunday morning breakfast was a tactic calculated to enhance the club’s financial returns.

Tobacco cases such as Sharp v Stephen Guinery t/as Port Kembla Hotel & Port Kembla RSL (2001) in which a barmaid was successful in a claim arising out of passive smoking in the workplace, point to the duty of care owed by gambling providers to their staff. The incidence of problem gambling among gambling venue staff is much higher than that of the general population. This might be a result of constant exposure to gambling, or it might be that persons with a disposition to developing gambling problems are attracted to work in the gambling industry. Whatever the cause, there is a common law duty of care owed by the employer accompanying the statutory duty to provide a safe workplace. That duty of care may be breached when staff are encouraged or permitted to gamble when off-duty.

New Jersey cases

GNOC Corporation v Aboud (1989), involved a disputed casino gambling debt. Judge Cohen of the New Jersey District Court considered that there was “nothing fundamentally unfair about imposing upon a casino the duty to prevent patrons such as Mr Aboud from gambling while patently intoxicated, for they are in the best position to do so.” New Jersey has responsible service of alcohol laws.

In Greater Bay Hotel & Casino v Tose (1994), an Atlantic City casino sued for an unpaid gambling debt, which the gambler defended on the grounds that the casino knowingly allowed him to gamble while intoxicated. The New Jersey Court of Appeal affirmed its view that a casino may owe a common law duty to a patron to prevent him from gambling when he knows he is intoxicated.

Hakimoglu v Trump Tai Mahal Associates (1995) also involved Atlantic City casinos. The plaintiff alleged that the casinos had “intentionally and maliciously enticed him” to gamble at the casinos by providing him with free alcohol and other inducements. The judges in this case were against extending a duty of care to situations where casinos permit drunken patrons to continue gambling.

Claim against a third party

In Madden v Irish Turf Club & Others [1997] IESC 1; [1997] ILRM 148, the Supreme Court of Ireland held that the administrators of a horse race had no duty of care to a punter who missed out on winning a prize due to their error in allowing an unqualified horse to run.
There was no direct contractual relationship as the punter bet on a totalisator run by a third party.

The judges in Madden’s case were swayed by public policy considerations saying:

“There is no doubt that if this proposition (i.e. the existence of a duty of care) were accepted, it would have very wide consequences. It would mean that if through any one of a myriad of circumstances a horse that should have won did not win, and it could be shown that this was due to carelessness on the part of the defendants, then there would be, to adopt the dictum of Cardozo CJ ‘liability in an indeterminate amount for an indeterminate time to an indeterminate class’: Ultramares Corporation v Touche (1931) 255 NY 170 at p.179.”

Is a monetary damage an appropriate remedy in gambling cases?

We raised this issue with the Productivity Commission (1999):

“If we can establish a breach of duty of care, then the thorny question of compensation remains. What compensation should a court award to a problem gambler who got drunk on free drinks and lost all his money? All his money back again? How do we prove how much he lost? The gambling provider didn’t keep any records and neither did the gambler. Even if we can prove how much he lost and get it all back to the gambler, we may simply be enabling him to go and gamble it all again. We can’t force him to pay his bills or use the money to support his family.”

(p. 16.45)

This issue of compensation was neatly resolved in Famularo’s case by the entry of judgment in favour of the gambler against the hotel for a similar amount to his outstanding debt to American Express. Following the judgment, arrangements were made for the money to be paid directly from the hotel to American Express.

What happens to the money?

In a case that never made it to court, a female gambler sued a club for damages claiming a number of inducements and misrepresentations. She had gambled all her money and lost her home, with losses in excess of $400,000. Her claim included allegations that the club had induced her to gamble, promising that gaming machines ‘must pay’ and reserving a machine for her exclusive use. Ultimately the club paid her a substantial lump sum settlement and she immediately moved interstate. The gambler had steadfastly refused to attend treatment for her gambling addiction. Presumably the settlement monies were soon gambled and lost, leading to the obvious question: Why bother to sue?

Claim by a third party

Consider the situation where a gambler steals money from an employer, friend or family member to gamble. The gambler is known to the local venue as being an ordinary person of modest income and means. The gambler’s expenditure increases to the point where suspicions might arise as to the source of the funds. Does this create a duty on the part of the gambling provider to raise questions or take any action?

This question has not been satisfactorily dealt with by the courts in relation to gambling.

The quasi-contractual remedy of “money had and received” will be available where a gambling provider is aware that stolen money is being gambled. It is not clear whether the remedy will be available in circumstances of mere suspicion.
The courts in England and Australia have adopted the doctrine of ‘unjust enrichment’ that originates from the American Law Institute (1936). The boundaries of the unjust enrichment doctrine remain undefined so it is ripe for application to gambling cases. The court must weigh up the respective merits of the employer’s claim against the gambling venue. The employer says, “The venue should have known that the money was stolen.” The gambling venue says, “We didn’t know. The employer should be more careful with its money.”

In Lipkin Gorman v Karpnale (1991) a solicitor withdrew a large amount of money from his firm’s account and gambled it at London’s Playboy Club. The Club was unaware that the money was stolen and had accepted the solicitor’s bets in good faith. On the facts there appeared to be unjust enrichment. However, the House of Lords held that the club had changed its position by paying out on his winning bets, and it would therefore be unjust to require the club to repay the stolen money.

The court said:

“In these circumstances, it is right that we should ask ourselves: why do we feel that it would be unjust to allow restitution in cases such as these? The answer must be that, where an innocent defendant’s position is so changed that he will suffer an injustice if called upon to repay or to repay in full, the injustice of requiring him so to repay outweighs the injustice of denying the plaintiff restitution. If the plaintiff pays money to the defendant under a mistake of fact, and the defendant then, acting in good faith, pays the money or part of it to charity, it is unjust to require the defendant to make restitution to the extent that he has changed his position.” (at p.579)

The defence of change of position has been accepted by the High Court of Australia in David Securities v Commonwealth of Australia (1992).

However, the unjust enrichment doctrine could be applied by simply deducting the total amount of monies paid to the gambler as prizes from the amount required to be repaid to the rightful owner of the money.

Claims by spouses

The potential for spouses of problem gamblers to seek legal redress against gambling providers has yet to be explored, however, it would appear that the doctrine of unjust enrichment would apply to them.

Where a spouse intentionally or recklessly gambles away a large sum to prevent it being available for a Family Law property settlement, there is power in s.85 Family Law Act for the Family Court to set aside the disposition and order the repayment of the money.

Such an order might affect gambling expenditure even if there was nothing unusual to alert the gambling provider, see In the Marriage of Abdullah (1981). However, under s.85 (2) Family Law Act, the gambling provider would have the right to oppose such an order, and the court would weigh up the respective merits of the spouse’s claim and the rights of the gambling provider.

An order under s.85 FLA could effect all gambling expenditure by a gambler following the filing of an application for property settlement, see Dickey (1997).
Where will the duty of care go?

Deregulation of legal profession, especially allowing advertising has led to vigorous marketing by lawyers, which has led to a rapid escalation of claims in the areas of motor vehicle injuries, medico-legal litigation, public liability claims etc. This resulted in the escalation of insurance premiums. The NSW government has legislated to greatly restrict motor vehicle injury claims and is under strong pressure from the medical profession, schools and local councils to likewise restrict the extent of claims against them. The judiciary are well aware of public concern over the cost of duty of care claims and is reluctant to extend the categories of claim.

No compensation for pure economic loss

Gambling claims are usually for pure economic loss. Whilst physical injuries might result from repetitively pressing the play button, or falling off a stool, these are different to claims relating to gambling losses. The High Court in Perre v Apand Pty Ltd (1999) has established a general rule that there is no general duty of care not to cause harm that results in pure economic loss.

The development of the common law may be limited to a defence to claims rather than a claim in its own right. This might enable a case such as Famularo (2001) to succeed, where the gambler was seeking to avoid liability to pay a kind of gambling debt to a third party creditor closely associated with the gambling venue. A case such as Reynolds (2001) would not succeed, as Reynolds was seeking an order that the club pay him money.

Making claims under the Trade Practices Act 1974, rather than the common law duty of care may also overcome the pure economic loss restriction.

Lawyers and gambling

The role of lawyers in encouraging gambling litigation has the potential for harm. Lawyers see the world as a series of legal structures, with the adversarial nature of legal procedure as the best way of determining the application of the law. Monetary compensation is the usual remedy where there is a breach of the law that harms a person.

It cannot be denied that lawyers have a vested interest in litigation, as it forms the basis of much legal employment. So lawyers have an inclination to encourage gamblers to seek redress through the legal system.

Problem gamblers may have a different agenda. Seeking to recover money lost, or seeking a scapegoat for such loss, the problem gambler may seek out a lawyer in the hope that the lawyer will rescue him or her from a difficult situation. The problem gambler tells the lawyer what he or she thinks will help the case, and the lawyer hears what he or she wants to hear. The result may be a case based on flimsy evidence.

Lawyers rarely think of litigation as a form of therapy, or even consider what will happen to the compensation that may be awarded to a successful litigant.

Judges and gambling

Courts have expressed an unwillingness to accept that the common law duty of care extends to gambling at all. This may be a reflection of the moral and cultural background of judges, who mostly come from middle-class and wealthy backgrounds and therefore lack exposure to gambling. Comments from judges reveal their view that gambling is essentially immoral and undesirable, and that people who gamble essentially do not deserve assistance from the court system.

For example, Acting District Court Judge Hogan, who heard the Reynolds case at first instance said:
“I must confess that I do not understand the excitement. I am not a gambler. Whenever I have been to a club or casino I have been impressed by the absence of any sign of joy, delight or pleasure on the faces of those who are gambling. After a long career as a common lawyer, I am very much aware of the suffering that is caused, to the gamblers themselves, and more poignantly to their families, by the affliction of compulsive gambling.”

May LJ in Lipkin Gorman v Karpnale Ltd made a conscious effort to overcome his distaste of gambling, saying:

“In passing, I comment that one must not let one’s mind be prejudiced by the gambling context that there is behind the solicitor’s claim against the club. The latter was licensed under the relevant statutes and its gambling activities were entirely lawful.”

Moreover, the judges affirm the social requirement that the individual gambler accept responsibility for his or her actions. McHugh J. in the High Court case of Perre v Apand said:

“One of the central tenets of the common law is that a person is legally responsible for his or her choices. It is a corollary of that responsibility that a person is entitled to make those choices for him or her self without unjustifiable interference from others.”

So the critical factor in civil liability is not a duty of care to protect a gambler from causing harm to himself, but whether there is “unjustifiable interference” with the gambler’s freedom of choice.

The case of Famularo fits this approach. Famularo was a gambler who incurred substantial debts on his American Express charge card. The gambling provider, O’Malley’s Hotel took active steps to encourage him to incur such debts by making misrepresentations. Those active steps included a misrepresentation that Famularo was entitled to access cash advances on his charge card. That misrepresentation was unjustifiable interference.

Does actual knowledge that a gambling problem exists create a duty of care?
The mere fact that a gambling provider knows that a patron has a gambling problem, does not create a legal duty to intervene. The trial judge, Hogan ADCJ, in Reynolds said:

“How was the club to identify the class of people to whom it owed a relevant duty? Did it owe a duty to all its members to ensure that they did not lose any money by gambling? But some have to lose in order that others may win. Did it owe a duty only to those who were problem gamblers to its knowledge? How is it expected to know? Some people bet astronomical amounts, and might well be problem gamblers, but have enough money and resources to be able to continue to bet. Should the club confine its solicitute to those who were betting more than they could afford? How was it to determine how much a particular member should be allowed by it to bet? Most club members would regard it as intolerable if any club official were to form an opinion about their prudence in the extent of their gambling and thereupon attempt to place restrictions upon their ability to use the facilities of the club of which they were members. They would feel themselves
entitled to reply, using language more or less colourful, ‘It is my money. I may do with it as I wish.’"

In other words, a gambling venue can identify a problem gambler and remain passive, permitting that person to continue gambling and suffering harm without any legal responsibility to assist. Further, the gambling venue can also provide the usual inducements to gamble such as subsidized meals and free soft drinks. It is only at some point beyond the normal range of behaviour that a legal liability may come into existence.

**Practical problems with civil litigation**

Despite keen interest in the development by the legal profession, only a handful of civil cases have been commenced in Australia and even less have reached court.

As well as the substantial legal obstacles outlined above, there are a number of serious practical obstacles to civil litigation.

The primary obstacle is the lack of evidence upon which to found a case. Dealings between a gambler and gambling provider mostly relate to spoken words and the passage of cash. What is said is easily forgotten, and cash moves without a trace.

Gamblers have notoriously poor memories when it comes to remembering what was said or done and when. They appear to live in a hazy and unreal world where the facts are whatever is convenient for the moment.

The cases that have reached court are exceptions. In *Famularo* (2001), there were the detailed American Express records of cash advances. In *Reynolds* (2001), there were the milk run cheques. Such records are only part of the minimum necessary to found a case. As well as having records it is necessary to convince the court that a precise claim exists. It is not enough to say “I lost all my money at the casino”, it is necessary to establish exactly how much money was lost. If a gambling relationship were a series of bets, then it would be desirable to have a record of the outcome of each individual bet.

The use of player tracking systems provides a potential means to overcome the evidence problem. For example, where a gambler stole money from his employer and gambled it at the Casino, the police were able to subpoena the Casino gaming records and prove how much was gambled and how much was lost and when. The information was used in the prosecution of the thief, but arguably, player-tracking records might potentially provide the evidence for a claim by the owner of the stolen funds against the gambling venue.

The success of civil claims depends upon the credibility and of the evidence of the plaintiff. Often problem gamblers do not make credible witnesses. They are conditioned to lying as a strategy of avoiding criticism for their gambling habit. When they get to court, they find it difficult to tell the exact truth. The few gamblers who have been to court are probably exceptional in that they have the intelligence and strength of character to provide honest and cogent evidence.

**Does civil litigation achieve a worthwhile purpose?**

The civil litigation process is structured to provide compensation for injury or loss. The assumption is that a lump sum of money is a desirable way of making up for the harm that has been done. This is best seen in personal injury settlements where a lump sum is given to be invested wisely and used to pay for living costs, medical treatment, home care etc of the injured person. However, many successful litigants in Australia have not invested their compensation wisely. A problem gambler who is not fully ‘cured’ is at risk of simply going out and losing all that money again if it comes in the form of a lump sum that can be accessed as cash.
In Famularo (2001), the gambler sought to have the hotel pay his debt to American Express. Reynolds (2001) was seeking a compensation payout but was adamant that he was ‘cured’ of his gambling problem. Unlike Reynolds, the claim that most potential claimants are ‘cured’ of their gambling problem rings hollow, particularly if they are looking for a quick cash settlement.

**The role of government**

Because the number of civil cases has been very few and is unlikely to greatly increase, pressure will remain on government to continue to provide a strict regime of controls. Until recent times, the level of governmental interest in responsible conduct of gambling was low. Since IPART and the Productivity Commission however, governments both State and Federal have adopted their RCG responsibilities with zeal. This has resulted in widespread shock on the part of industry, who had mostly not expected the amount and rate of change. We are now experiencing an extraordinary rate of change in the legislative constraints such as the Gambling Legislation Amendment (Responsible Gambling) Act 1999 (NSW) affecting the provision of gambling, restricting or prohibiting inducements such as free alcohol or credits, credit, cheque cashing, advertising and promotions.

The next wave of legislation may provide a level of protection for third parties such as family members, employers and others whose money is taken in a variety of ways and gambled. Legislation may require the keeping of records of gambling expenditure and a procedure whereby gambling venues are required to take the welfare of family members into consideration, and return stolen money to its rightful owners.

**The future of civil litigation**

The lawyers for Reynolds have applied for special leave to appeal to the High Court. It is likely that the High Court would accept the existence of a duty of care by gambling providers towards problem gamblers, but limit its scope to the situations proposed by Wood CJ in Preston, such as the provision of free alcohol and excessive inducements to gamble. In addition, the use of the Trade Practices Act is likely to become the mainstay of civil cases, as it enables the courts to treat the conduct of gambling venues on the same standard that applies to all businesses.

However, as governmental regulation increases, regulation of the gambling industry will increasingly be conducted through prosecutions for breaches of the legislation, rather than by civil litigation.

The ban on credit for gambling that exists in Australian jurisdictions has greatly reduced the likelihood of civil actions, by removing the need to argue over non-payment of gambling debts.

Most civil claims are likely to involve claims for compensation where there has been an unconscionable or illegal provision of inducements such as free alcohol, or misleading or deceptive conduct.

Despite the decision of Lipkin Gorman v Karpnale (1991), there will inevitably be further attempts to recover stolen monies from gambling venues. These may well rely on the records retained by venues showing the amounts won and lost by the gamblers as they dissipate the stolen monies.

Finally, the prospect of a class action against the manufacturers of gaming machines seems inevitable, considering their addictive characteristics and absence of warnings or consumer protection mechanisms. Such a class action is likely to be run on similar grounds to claims against tobacco manufacturers.
References


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‘Harm minimisation’ in NSW: leading the way in addressing problem gambling

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Introduction
An unfortunate aspect of the Australian character is that we tend to be a ‘nation of knokers’. This is a particularly unfortunate in the context of ‘harm minimisation’ as our tendency to ‘knock’ inhibits us from recognising the great achievements that have been made in this field in NSW over the past three years. Worse still, it prevents us from giving due credit to those responsible for these achievements and this is particularly unproductive as that failure to give people due credit does not encourage them – in the way we should – to continue the great work they are doing.

The Carr Government in NSW has led the way in addressing harm minimisation in a manner which has not been duplicated anywhere else in the world (or in Australia). NSW Government legislators, regulators and the Liquor Administration Board can all justifiably feel proud that they have achieved so much and set a practical, well thought out example for the rest of the world.

This presentation will review the extraordinary progress that has been made in NSW over the last three years. It will also highlight two very distinctive characteristics of that 3-year journey that are new and welcome developments in this area. The first of those is a unique and unprecedented level of co-operation between government and industry in conceiving and evaluating ‘harm minimisation’ measures. Many of the technical harm minimisation proposals implemented (and to be implemented) in NSW were suggested by the gaming industry, evaluated by the Government and introduced in the suggested form or in an amended form. The second distinctive characteristic of this three-year journey might be said to be recognition of the need for evidence-based measures. The NSW Government, NSW regulators and the NSW gaming industry have recognised that if existing or proposed ‘harm minimisation’ measures prove to be less effective than originally thought – once properly evaluated through research – they should be reconsidered (particularly if they produce negative effects for problem gamblers). These trends show every indication of continuing and firmly establish NSW as the current leader in problem gambling ‘harm minimisation’.

NSW ‘Harm Minimisation’ Time Line
The accomplishments of the NSW Government in the harm minimisation area may be conveniently reviewed by reference to the four phases outlined, in graphic form, in Figure 1 below. Why has NSW become the world leader in this field? Cynics in the audience today might say that it is because we have more problem gamblers than anywhere else in the world (or more machines). However, this is demonstrably not true.

Tim Costello and Royce Millar, in their recent book “Wanna Bet”, point out that “the average yearly expenditure per machine across (Indiana, Colarado, Connecticut and Missouri) is about
A$95,000 compared to Australian expenditure of $32,000.”1 This figure, they say, “dents the assertion that Australians are uniquely inveterate gamblers.”2 Moreover, Australia only has 2.4% of the World’s legal gaming machines3.

Figure 1. Harm minimisation accomplishments

The answer to the question of why NSW is leading the world in this area is that the NSW Government, the NSW Liquor Administration Board and the NSW Department of Gaming and Racing have reacted to community concern over problem gambling by:

- Developing the world’s most comprehensive and innovative legislation and regulatory package to address problem gambling;
- Developing, in close consultation and co-operation with the industry, innovative ‘world first’ technical standards to address problem gambling;
- Adopting a flexible approach to regulation and standards recognising that, because this is a very new area and one which there has been little, if any, research:
  - A creative approach is required in terms of the formulation of new measures; and
  - New measures proposed need to be evaluated whether they ‘work’ to ensure that an ‘evidence based’ policy approach is adopted; and
  - If measures are found not to ‘work’ following such evaluation, they should be dropped.

In this paper, we will review each of the four stages of ‘harm minimisation’ depicted in Figure 1 and evaluate their effectiveness and what has been learned from each stage.

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Gambling Legislation Amendment (Responsible Gambling) Act, 1999

The Gambling Legislation Amendment (Responsible Gambling) Act, 1999 ("GLARGA") received assent on 2 November 1999. This legislation was and remains the most progressive legislation of its type in the world. It effectively set out a well thought out ‘road map’ for further responsible gaming initiatives and that road map continues to be followed to this date. GLARGA can be said to have dealt with six principal areas of responsible gaming.

1. Establishing “Harm Minimisation” as a Regulatory Priority

GLARGA required “all persons having functions under” the Liquor Act and the Registered Clubs Act to have “due regard to the need for gambling harm minimisation” and “to foster the responsible conduct of gambling activities”. The use of the words ‘to have due regard’ and ‘to foster’ are unusual legislative directions to give to the Liquor Administration Board and the Department of Gaming and Racing in that they are inspecific but emphatic directions. The terms ‘harm minimisation’ and ‘responsible conduct of gambling activities’ were not defined so this effectively amounted to a direction to the Liquor Administration Board and the Department of Gaming and Racing to establish a policy to achieve these goals. The important point to note is that the Act gave the Department and the Liquor Administration Board a very clear and a very broad directive regarding the priority to be accorded to responsible gambling issues.

2. Advertising Restrictions

The second issue to be addressed by GLARGA was the question of advertising that was required not to be “false, misleading or deceptive”. This amendment effectively required the Liquor Administration Board to have regard to the significant body of case law that has evolved through the interpretation of these terms for the purposes of the Trade Practices Act, 1975.

3. Regulations

Thirdly, GLARGA prescribed that Regulations were to be prepared dealing with six general policy areas:

- Restricting or Prohibiting the Conduct of Promotions
- Establishing Standards for Responsible Gambling Activities
- Establishing Training Courses
- Provision of Information and Signs to Players
- Restricting or Prohibiting Inducements
- Display of Counseling Availability Signage

These six areas were subsequently dealt with, in detail, in the GLARGA Regulations (which were developed and approved over the following five months).

4. Gambling on Credit and the Making of Cash Advances

The legislation prohibited the extension of credit or cash advances to players to gamble.

5. Self-Exclusion Schemes Reinforced

An aspect of self-exclusion schemes that remains a significant problem in many other jurisdictions was addressed in a timely and effective manner in the Act. Gaming industry operators have always been understandably reluctant to get physically involved in enforcing self-exclusion arrangements by either removing problem gamblers from gaming floors or...
preventing them from entering gaming floors. The legal liability that could arise from any such action could, of course, be significant. GLARGA addressed the issue by providing that it was lawful for a venue operator “using no more force than is reasonable in the circumstances” to prevent a participant from entering premises and to remove them from those premises.

6. Card Based Gaming

Finally, GLARGA prescribed that Regulations should be made “for or with respect to cards for the operation of gaming machines”. As the Honourable Richard Face MLA, Minister for Racing and Gaming stated, in his Second Reading Speech:

“The bill will enable introduction of gaming machines that can be operated by cards, the making of regulations dealing with the types of cards that may be used and the amounts that may be stored on the cards. These details will be subject to consultation with relevant industry groups. Discussions on the matter are taking place now. They will take into account the relevant harm-minimisation principles. It is thought that the cards will assist in our knowing how much people are spending, without in any way infringing on their privacy. The cards might enable us to overcome many problems.”

Glarga Regulations

The Gambling Legislation Amendment (Responsible Gambling) Act, 1999 Regulations were approved in April 2000. The Regulations spelt out, in some detail, eleven specific responsible gambling initiatives.

7. Notices and Information

The GLARGA Regulations prescribed that a notice in the form appearing below was required to be displayed in hotels and clubs to clearly highlight the odds of winning ‘the maximum prize’ on gaming machines:

"THE CHANCES OF WINNING A MAXIMUM PRIZE UP TO $10,000 ON A GAMING MACHINE IS GENERALLY NO BETTER THAN 1 IN 1,000,000."

As the Minister stated in his second reading speech:

“The bill also introduces a number of important consumer protection measures. Those measures will ensure that people who wish to spend their time and money gambling will do so with their eyes wide open.”

The notice in question clearly achieves the goal of bringing home a key message relating to the odds of winning the maximum prize. It also raises the question of whether there has been any research into the effectiveness of signs on problem gamblers:

- Are they effective?
- If so, what are the most effective messages?
- Are some modes of delivery more effective than others?
- Are players confused by multiple notices on different issues?
- If so, how should priorities be set?
- Which notices should be dispensed with?

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4 Hansard, 22/09/99, Second Reading Speech
5 Hansard, 22/09/99, Second Reading Speech
In Victoria, it has been suggested that some gambling warning messages actually encourage gambling. It appears that further research is warranted in this area.

One of the most significant of the innovative harm minimisation measures set out in the GLARGA Regulations was the concept of a “Player Information Brochure” which was designed to provide players with a new level of information in relation to gaming machines. Gaming Machine Manufacturers in NSW, who had already been giving the concept consideration, prepared and submitted to the Minister, for approval, an information booklet known as the AGMMA Player Information Booklet.

This document had been discussed and ‘fine tuned’ with the Department of Gaming and Racing. It was launched by the Minister in July 2000 and has been acclaimed as a major advance in responsible gaming by counselors, gaming venues, regulators and legislators both in NSW and elsewhere. The document is available for free from the www.agmma.com website. It represents another ‘world first’ for NSW in terms of the empowering of players and counselors with authoritative frank information about gaming machines.

An example of this frankness is as follows:

“People who play gaming machines to increase their income are either misinformed or just plain foolish.”

The booklet – which was endorsed by club and hotel organisations in NSW and distributed by them to their members also highlight an important new trend in responsible gaming in NSW: a significant increase in co-operation between operators, manufacturers and regulators to address problem gaming.

The NSW Department of Gaming and Racing also launched its innovative series of ‘PlaySmart’ booklets that address much the same issues in a more compact format.

NSW gaming venues are required ‘make available’ one of the two versions of the booklet to players in all venues and players must be ‘alerted to their presence’.

The significance of these ‘PIB’ booklets should not be underestimated.

They represent the first of their kind anywhere in the world and place NSW players in a position to easily achieve a level of ‘informed consent’ which is, frankly, not available to them in other jurisdiction at this point (although several are considering similar models).

The PIB Booklet proposed disclosure of a specific ‘plain English’ simple disclosure of the chances of winning in the form of “Chances of Winning” (COW) card which would permit players to compare machines effectively for the first time.

The Regulations also prescribed that a number of varieties of warning notices be ‘displayed’ on gaming machines and ATMs. It was also prescribed that counseling signage (relating to the G Line number) be displayed ‘in the vicinity of the main entrance of venues’.

This raises the question, again, of whether the notices are effective in reducing problem gambling and, if so, whether any particular style or size of notice is more effective than others.

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6 The Australian Gaming Machine Manufacturers Association (AGMMA)
The Regulations also prescribed that clocks must be displayed in such a way that they can be “readily viewed by any person operating a (gaming) machine”.

Although a number of other jurisdictions have followed the lead of NSW in relation to the display of clocks, it has been suggested that clocks are unlikely to provide substantive assistance to problem gamblers.

1. Cheque Cashing Limit

The GLARGA Regulations prescribed that gaming venues in NSW be restricted in terms of cashing cheques for patrons through a $200 limit, a restriction of one cheque per person per day and a prohibition on the cashing of cheques through provision of credits that can be played. These restrictions were designed to prevent problem gamblers from cashing cheques. There has not been, to the knowledge of the writer, any research into the effectiveness of these measures. Have problem gamblers been assisted by these prohibitions?

2. Payment of Prize Money by Cheque

The Regulations required that all prizes exceeding $1,000 were to be paid by crossed cheque, the objective being to prevent problem gamblers from immediately playing machines with the proceeds of a ‘big win’. Whether this measure has proved successful in terms of reducing problem gambling has not, to the knowledge of the writer, been evaluated. It appears that the measure has, however, contributed to the growth of a new industry of third party cheque-cashing organisations several of which charge significant fees for the service.

3. Location of ATMs and EFTPOS Facilities

The Regulations required that cash dispensing facilities be located away from locations where gaming machines are installed. As the Honourable Richard Face, Minister for Gaming and Racing, stated during the Second Reading Speech:

“The primary intent of the bill is to provide an opportunity for a person who has been gambling and who wishes to withdraw further funds to continue gambling to have more time to think about the implications of the increased expenditure.”

No research has been carried out into whether this measure has been effective in terms of reducing problem gambling.

4. Gambling Advertising

Gaming advertising was restricted by the GLARGA Regulation through the prohibition of advertising that:

- Encourages a breach of the law;
- Depicts children;
- Is false, misleading or deceptive;
- Suggests that winning a prize is a likely outcome of participating in gambling activities;
- Suggests that participation in gambling activities is likely to improve a person’s social standing or financial prospects;
- Suggests that a player’s skill can influence the outcome of a game that is purely a game of chance;
- Depicts or promotes the consumption of alcohol when engaging in gambling activities;
• Is not conducted in accordance with decency, dignity and good taste in accordance with the Commercial Industry Code of Practice.

These restrictions were innovative and arguably constituted, when introduced, the most severe statutory restrictions on gambling advertising in any gaming jurisdiction in the world. The question of the extent to which gambling advertising impacts on problem gamblers has not, to the knowledge of the writer, been researched.

All gambling advertising published was required to contain a warning notice:

"IS GAMBLING A PROBLEM FOR YOU?
G-LINE (NSW) IS A CONFIDENTIAL, ANONYMOUS AND FREE COUNSELLING SERVICE
FREE CALL 1800 633 635"

Publicity for Prize Winners
The Regulations prohibited gaming venues from identifying prizewinners that win more than $1,000 who request that their identity not be published. It is not clear whether this measure was intended to reduce problem gambling or whether it actually has this effect. More research is required in this area.

1. Gambling Inducements

NSW Venue operators were prohibited, by the new Regulation, from:
• Offering or supplying any free or discounted liquor “as an inducement to participate” in gambling or
• Offering free credits to players.

There has, to the knowledge of the writer been very little research, if any, on the role of promotions in relation to problem gambling. Anecdotal evidence suggests that problem gamblers seek to avoid the identification and tracking associated with loyalty systems but further research is required in this area.

2. Training of Staff

The Regulation introduced a new requirement, another ‘World first’ for NSW, in relation to the training of persons “whose duties are concerned in the conduct of” gaming machines. Such persons were required to complete an “approved course” within 18 months. That course, which was subsequently put together (and became known as the Responsible Conduct of Gambling (“RCG”) Course), has now been completed by qualifying NSW club staff in NSW (approximately 27,000) and by all required qualifying hotel staff. The writer completed the course (which is given by a small group of qualified trainers approved by the Department).

3. Self-Exclusion Schemes

Self-exclusion schemes were promoted by the Regulation in another unique initiative that has effectively set the benchmark for corresponding provisions in other jurisdictions.

The Regulation prescribed that:
• Venues could not refuse requests to participate;
• Intending participants in self-exclusion schemes must be required to give a “written and signed undertaking that he or she will not gamble…for a period specified in the undertaking”;
• Participants were to be given the opportunity to seek independent legal or other professional advice at their expense as to the meaning of the undertaking;
• Participants entering into the undertaking were to be provided with information about the availability of gambling related counseling and treatment services;
• “Responsible persons” in each venue were to be appointed to “readily identify the participant whether by means of a recent photograph or otherwise” (this has proved to be a very difficult task as many participants go to great lengths to disguise themselves in order to gain access to venues);
• Venues were required to “publicise the availability of the scheme and information as to how it operates”;
• Participants were to be prevented from withdrawing from the scheme within 3 months after requesting participation.”

These requirements were described as the minimum requirements for self-exclusion schemes. Many venues in NSW have, in fact, exceeded these requirements by providing and funding counseling for participants demonstrating, again, the support exhibited by the gaming industry for these initiatives.

LAB “first determination”

Technical Standards
One of the principal regulatory tools utilised in regulating the gaming machine industry has been the technical standards prescribed by the Liquor Administration Board (“LAB”) in relation to gaming machines. The LAB, charged with having “due regard” to the need for “gambling harm minimisation” in late 1999, resolved to introduce a series of technical measures to address this regulatory priority.

A consultative process was established which led to the release, in April 2001, of the LAB’s “First Determination”8. The consultative process permitted the NSW Gaming Industry to demonstrate its support for effective harm minimisation and this support and the pro-active approach of the NSW Gaming Industry in suggesting alternatives to explore was acknowledged by the LAB in the First Determination itself:

“The Board acknowledges the very substantial steps taken by industry and in particular the hotel and club industries to put in place measures to reduce harm from the use of approved gaming machines.”9

The Board specifically acknowledged the input provided by the NSW Hospitality and gaming Group made up of representatives of ClubsNSW, Australian Hotels Association (NSW), Star City, The Leagues Club Association of NSW, Club Managers’ Association and TAB Limited10. The Board expressed the view that “there are a great number of people who do not fall within the Productivity Commission categorisation of problem gamblers who in fact have substantial gambling problems”11 and stated that “steps should be taken wherever possible to prevent them from becoming problem gamblers…”11. However, the LAB also recognised that

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7 See page 5 above.
8 See DGR website: www.dgr.nsw.gov.au for full text.
9 LAB “First Determination” page 16
10 LAB “First Determination” page 23
11 LAB “First Determination” page 19
“the pure recreational gambler poses no problem to him or herself or to society” and described its task as a “balancing exercise”\(^\text{12}\).

**Five Principal Areas Addressed**

The LAB’s First Determination may be said to have dealt with five general areas:

- Player Information
- The Cash Input Limit
- Pull Through Messages
- Art Work Restrictions
- “Play Though”/Button Presses

**Player Information**

One of the most significant innovations announced by the LAB in the “First Determination” was the concept of the “Player Information Display” (or PID) which you will soon see on NSW gaming machines and, in fact, gaming machines elsewhere in Australia and overseas.

The PID – which draws on the concept of the COW card in the PIB\(^\text{13}\) - envisaged disclosure to players at the touch of a button (or screen icon on a touch screen):

- Total theoretical percentage return to player for the game including any progressive features in stand alone progressive games;
- Dollar value of the top 5 single prizes
- The probability of winning the top 5 single prizes
- The probability of winning the lowest 5 single prizes

The PID is to be accessible in idle mode and “pull through” messages advising of its availability are to be displayed on a regular basis.

Since the time of the First Determination, concerns have been expressed by the gaming industry that disclosure of the total theoretical return to player for the game may be misleading and should perhaps be reconsidered. The difficulty perceived is two fold.

Firstly, approximately 50% of machines in NSW are on ‘links’ – that is machines connected to a system permitting players to win an additional prize from the link: technical constraints prevent the disclosure of the link return (which can be adjusted) on the PID. So players could receive incomplete and inaccurate information.

Secondly, concern has been expressed that players may believe that they will actually experience that disclosed ‘theoretical percentage return’ (when in fact it is calculated over perhaps a million games so the chances of a player actually experiencing it during a playing session are very small). These issues have yet to be resolved.

The common object of both the industry and the Government is to ensure that players receive the best available information that minimises the prospect of players being misled in any way. An alternative to disclosure of the theoretical return to player for each game may be the disclosure of the minimum statutory theoretical return to player and a cross reference to the AGMMA booklet explaining exactly what the ‘theoretical return to player’ is and how it is calculated.

\(^{12}\) LAB “First Determination” page 19

\(^{13}\) See page 10 above.
Cash Input Limit
The LAB determined that the existing Cash Input Limit in NSW be reduced from $10,000 to $200 which effectively would prevent any player from inserting more than $200 into a gaming machine at one time. The original proposal to reduce the cash input limit was made by the NSW gaming industry as one of many harm minimisation initiatives proposed by the industry itself.

Pull Through Messages
The LAB also endorsed another innovative proposal by the NSW Gaming Industry – that is, the concept of ‘pull through’ harm minimisation messages that run across the screen every 30 minutes and whenever the cash input limit of $200 is reached.

The LAB also determined that ‘session information’ be disclosed to players:

- Money gambled
- Money won
- Money spent (gambled less won)
- Current time
- Time spent playing
- Average cost.

Subject to resolution over concerns regarding accuracy of session information regarding links (for the same reasons as outlined above) and security/privacy (it was suggested that it would be preferable for players to ‘call up’ the information rather than having it suddenly ‘appear’ possibly alerting passers by to the win of the player), the NSW gaming industry supported and endorsed these LAB initiatives.

Art Work Restrictions
The LAB also determined that gaming machine artwork is to be regulated by technical standards in a similar manner to the advertising restrictions described on page 11 above.

Play Through/Button Presses
The LAB also determined that the ‘play through’ facility (the facility to cut short the play cycle by simply playing the next game) and the ‘auto gamble’ facility be prohibited and that there be a resign of buttons to prevent continuous play without further button presses. A number of these initiatives were suggested to the Board by the NSW gaming industry as proactive ‘harm minimisation’ measures.

Measures Rejected or Deferred Pending Research
The LAB rejected a number of proposals on the basis that they would be unlikely to assist problem gamblers. These included a proposal to shut down machines for ten minutes every hour and a proposal to display LED messages in a range of languages.

Other proposed measures were deferred pending the completion of independent research by Sydney University and the Centre for International Economics into the measures.

Those measures to be researched included reducing the maximum bet from $10 to $1, slowing down reel spins and reconfiguring bill acceptors to prevent insertion of $50 and $100 bills. The NSW gaming industry expressed reservations about all of these measures on the grounds that it believed that the measures would not assist problem gamblers in any material way but were likely to have a significant adverse impact on recreational players.

The results of that research work will be made available by Sydney University in November 2001. The research was funded by the NSW gaming industry but carried out on an independent ‘arms length’ basis by Sydney University.
The industry requested Sydney University to include in the contract a provision requiring that the research be disclosed in its entirety so that there could be no suggestion that the industry had sought to conceal any aspect of the research results.

This research work was the first of its kind anywhere in the world. It involved 32 specially configured machines meeting certain LAB proposed specifications which were installed in 4 NSW clubs and 18 specially configured machines meeting certain LAB proposed specifications installed in 18 NSW Hotels.

The research cost more than $500,000 to complete. This cost was met in full (and voluntarily) by the NSW gaming industry. A number of NSW gaming venues volunteered for the three-week trials that involved a sacrifice by those venues of gaming revenue during that three-week period.

**Gaming Machines Bill, 2001**

The fourth stage in the harm minimisation time line described on page 3 is the Gaming Machines Bill about to be announced next week. Details of the Bill are not available at this time but it promises again to be leading legislation in this area.

**What Next?**

NSW has clearly taken a significant step forward in terms of seeking to minimise problem gambling through a broad range of innovative technical ‘harm minimisation’ measures most of which have not been utilised in any other gaming jurisdictions in Australia or elsewhere.

These measures need to be evaluated to determine whether they are effective in terms of reducing problem gambling. If any are shown to be ineffective in reducing problem gambling (or even cause additional harm to problem gamblers), they should be withdrawn or revised and replaced with effective measures.

One of the areas which is suggested as deserving further consideration at this stage is that of ‘harm reduction’ (as opposed to ‘harm minimisation’). By ‘harm reduction’, I refer to the provision of effective treatment to identified problem gamblers (as opposed to the broad ‘harm minimisation’ measure referred to above).

Whilst there are many effective counselors in NSW, the fact remains that anyone in NSW can claim to be a ‘problem gambling’ counselor – there are no statutory competency requirements and it is suggested that there is a case for developing these.

The NSW gaming industry has proposed to the Australian Psychological Society that psychologists give consideration to establishing a set of national competency standards in this area with a view to ensuring that psychological treatment provided to problem gamblers is as effective as possible.

No suggestion is made that psychologists should have any sort of exclusive role in the treatment of problem gamblers; however, it is suggested that psychologists are perhaps in a position to provide more effective psychological treatment to problem gamblers if these competency standards are developed.

The objects of the project proposed to APS are to:

- Establish competency standards for psychologists in the problem gambling counseling area
- Establish a network of qualified psychologists for venues to access
- Procure funding for problem gambling counseling

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14 Now the Gaming Machines Act, 2001 (NSW)
Conclusion

In conclusion, I would like to leave you with four thoughts:

- New South Wales legislators, regulators and the LAB are leading the world in ‘harm minimisation’ and we need to recognise these accomplishments and give them due credit for these accomplishments;
- The NSW gaming industry has and continues to support NSW ‘harm minimisation’ and has proactively assisted legislators, regulators and the LAB to develop effective measures;
- Most of the harm minimisation measures developed to date are untested in that it is not clear whether they do actually reduce problem gambling – and if so – to what extent; there is accordingly a need to evaluate what has been achieved to date – which is unique – to determine whether the achievements are as effective as they could be;
- ‘Harm Reduction’ (as opposed to ‘Harm Minimisation’) in the form of effective directed treatment of problem gambling is an area that merits further work, particularly in the context of the development of national competency standards for the treatment of problem gambling.
Gaming management contracts: an accountant’s perspective on disaster avoidance

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Abstract

As native peoples developed gaming enterprises, they typically had neither the industry expertise nor the financial resources to develop these facilities themselves. Initially, they contracted with management companies to operate their enterprises. In the United States of America, many of the initial management contracts were very unsuccessful and have resulted in significant litigation between the tribes and the management companies. The purpose of this paper is to examine some issues that cause problems. The paper raises certain cultural dimensions that may merit further study because of their impact on negotiations between native peoples and non-native investors. The paper focuses on certain accounting issues that are commonly forgotten because they relate to the unique circumstances of an Indian tribe. These issues need to be clarified in any management contract to avoid the problems that have typically arisen in the past.

Introduction

Native peoples who have the opportunity to develop gaming enterprises typically have neither the industry expertise nor the financial resources to succeed in this area. Initially, they are forced to turn to management companies to enable them to develop their enterprises.

In the United States of America, many of the initial management contracts were very unsuccessful and have resulted in significant litigation between the tribes and the management companies. An additional complication in the contracting process is the existence of federally mandated guidelines. The United States federal government established certain guidelines that must be met in the management contracts before they will approve them. The tribes have mixed reactions to these guidelines. In some situations the tribes have argued that the guidelines are paternalistic. In other situations, tribes have used the federal guidelines to invalidate the management contracts.
A good management contract requires a clear understanding of the motivation for the contract and the terms of the contract by all parties involved. Because the stakes are high, it is critical that the terms of the contract be clearly articulated. Many factors make this difficult to achieve. These factors include culture, varying expertise of the parties entering into the contract, and oversight by the federal government.

Differences in the cultural perspectives can lead to differences in objectives between the management company and the tribe. Different objectives mean that the parties to the contract focus on different items in the contracting process.

Differences in expertise of the two contracting parties can cause different types of problems. One party to the contract is the management company. Typically, it has an established history and strong expertise in commercial gaming. The management company is supported by its lawyers and accountants who have similar industry expertise. However, the management company and its experts normally have little expertise in tribal funding or reporting requirement. The other party to the contract is the tribal government and its lawyers. Normally, they do not possess the same degree of expertise in the casino industry as the management company. Unfortunately, the tribal council negotiators rarely turn to informed accountants before signing these management agreements. This leaves the tribes at a significant disadvantage.

The first time that the accountants discover the effect of what has been agreed to by the tribal negotiators is when they come to audit the financial statements in the following year. This “after the fact review” almost always raises questions and many of these questions end up in dispute.

The purpose of this paper is to examine some issues that cause problems. The paper raises certain cultural dimensions that may merit further study because of their impact on negotiations between native peoples and non-native investors. These issues need to be clarified in any management contract to avoid the problems that have typically arisen in the past.

**Development of Indian Gaming**

The economic history of the Native American tribes in the United States is closely tied to its political history. There were more that 400 Native American tribes living in North America when Columbus discovered the Western Hemisphere. These tribes varied in level of sophistication, economic development, and political sophistication. Over the centuries, the overall fate of the Native Americans in the United States deteriorated. In 1887, Congress enacted the General Allotment Act. The purpose of this act was to destroy the tribal system and force the Native American people to assimilate into “white society.” Tribal land was divided into individual parcels that were distributed to tribal members with the excess sold to nontribal individuals. Over the next century, the federal government shifted its position on Indian policy several times. The ultimate effect of this ever-changing policy was a reservation system that was economically depressed. Indians lands were reduced in size; many tribes had ceased to exist.

In 1987 the U.S. federal government passed the Indian Gaming Regulatory Act (IGRA (1987)), which permitted Native Americans to develop and operate gaming operations on sovereign tribal land if certain conditions were met. The intent of this bill was to encourage economic development and self-sufficiency. Prior to the passage of IGRA, some tribes had introduced certain gaming activities on tribal land in an attempt to build some type of economic base. Predominantly these were non-house banked games such as bingo. These operations were marginally profitable but the temptation to move to more profitable full casino style gaming was irresistible.
After 1987 the expansion of gaming on tribal lands has been spectacular in many states of the United States of America. Often, this development assumed urgency because of the possible introduction of anti-gaming legislation to prevent further gaming on Indian sovereign lands. Another reason for the rapid expansion was the fear that tribes that did not have gaming operations prior to IGRA would not be grandfathered in under the Act and would be prohibited from developing gaming operations in the future. In some states preferential compacts with state governments were signed with tribes that contained an exclusivity right. Tribes paid gaming fees to the state for their monopoly unless the state permitted a wider spread of gaming. If subsequent gaming was introduced in these states, the payments to the state ceased. Tribes in these states rushed to start up gaming operations so that they would be included in these preferential compacts. In other states, such as California, deadlines appeared to arise which required the immediate expansion of gaming operation to ensure that the extent of gaming was “grandfathered” in as existing under the compact negotiations. The expansion of gaming on Indian lands therefore has been more desperate and hurried than would have occurred under a free market economy.

Tribes had neither the gaming nor the economic expertise to put together plans to develop and manage sophisticated gaming operations. The complexity of the industry and its marketing and regulation were beyond the existing capabilities of most tribes. The need for rapid expansion caused many tribes to seek assistance from outside parties in the development, financing, and management of their gaming facilities.

Many of the agreements entered into with these outside parties were disasters for both the tribe and the outside manager/investor. One of the reasons for the failure of these contracts was because they were entered into by tribes under perceived duress. They were less favourable than might have been possible in an open market. However, even in more recent agreements, there is a continuing misunderstanding of the unique status of tribes and their objectives that causes confusion with contracts currently being negotiated.

**Role of Culture in the Contracting Process**

The Native Americans have associated with the Europeans and their cultures since the Europeans started exploring and settling in the “New World”. Despite various efforts by the federal government of the United States, the Native Americans have not been assimilated into the “white” society. In fact, the cultural and traditional differences of the Native American peoples has become a “cause celebre” in recent years and efforts to support traditional culture and language have been realized to be matters of urgency.

Hofstede (1980 and 1991) examined the cultural aspects of many nations in a five dimensional context. His cultural classifications have been widely used to explain similarities (and differences) in commercial practices across nations. Based on Hofstede’s evaluation of the “United States”, its people tended to be highly “independent”; highly “masculine”; very “short term oriented”; willing to accept uncertainty and very “low power distant”. Hofstede’s studies have never been extended to indigenous cultures operating within a nation. A limited, preliminary assessment of Native Americans using Hofstede’s classification scheme, indicated some possible major differences from U.S. culture. Our preliminary assessment of the Native American peoples is that they lie in a very different quadrant in several of these dimensions. Our tentative finding is that they are significantly less “independent” and more tribe oriented; their cultural side is more highly developed so that they are less “masculine/feminine conscious”; they are significantly more long term oriented for the survival of their people and they have a greater respect for elders and therefore a higher power distance concept.
These differences suggest that the cultural consequences of dealing with the Native American peoples exist in as complex a fashion as with any other “foreign” nation. Any party wishing to do business with Native American need to be aware of these differences, because they can have a significant effect on the contracting process.

A further culture related aspect that commonly causes significant stress between the tribe and a management company arises because of differences in objectives. Most commercial enterprises seek to maximize profits. The management company as a commercial enterprise often with stockholders and investors normally has relatively short-term gain as its overriding goal. That is not true of the tribe. The tribe normally has quite different objectives. These include the establishment of a long-term economic base for the benefit of future generations. Maximum employment for tribal members is also a vital issue for the tribe since most reservations are located in economically depressed areas and the extent of tribal unemployment is very high. Prohibition of the sale or consumption of alcohol on the reservation is often a highly sensitive issue.

Issues such as these need to be considered when negotiating the contract between the parties. If these issues are not anticipated, they will inevitably cause distress at a later date.

**Federally Imposed Constraints**

The role of the federal government in terms of its jurisdictional power and the legal status of a tribe is complex. Federally recognized tribes are treated as sovereign governments but they are not regarded as independent nations. Essentially, the tribes have the same standing as a state government although there are significant curbs on the extent of the jurisdictions of the tribe and its surrounding state.

When the federal government enacted IGRA, it did not grant the tribes free rein to develop gaming businesses. IGRA required the tribes to negotiate tribal state compacts and limited the type and extent of gaming to that agreed to by the state governments. The tribes have always regarded this as a severe infringement of their tribal sovereignty.

The intent of IGRA was to benefit the tribes and their economic base. It was not the intention of IGRA to benefit individual tribal members through the generation of profits from gaming and their distribution as per capita payments. It was also not the intention of IGRA to permit non-tribal operators to operate in an unfettered manner from tribal lands.

IGRA established certain significant constraints on the extent to which tribes could enter into gaming agreements with non-Indian companies to operate gaming from tribal lands. From the contracting perspective, the most significant provisions are those relating to approval of the contract and the level of profits that can be attributed to the management company and the power granted to the Bureau of Indian Affairs (BIA) to approve “per capita” distribution plans to individual tribal members. In each of these areas there is an imposition of maximum percentages of profits that could be distributed to each of these parties.

The sociological issues of these constraints are of interest. Why should the United States government limit the ability of tribes to contract with whomsoever they wished? It can be argued that tribes as sovereign nations (or ordinary groups of citizens) should be free to contract as they wish and as detrimentally as any other contractor in a weak bargaining position.

Some have argued that these restrictions represent a paternalistic approach to freedom of choice for the tribes. Others have argued that totally unregulated gaming rights within the borders of the United States would constitute an unacceptable threat. Irrespective of what is appropriate, IGRA did establish some very significant parameters that must be observed by
Indian tribes wishing to operate gaming enterprises. These constraints have a significant effect on the contracting process between the tribes and the “gaming professionals” with whom they contract to help develop their gaming operations.

The Contracting Process

Normally, there are two parties involved in the negotiation of a gaming contract, the tribe and the management company. The tribes, even when represented by legal counsel, were initially novices in terms of gaming. The management company and its legal counsel are normally sophisticated with regards to commercial gaming activities, but may be very unsophisticated with regards to negotiating with tribal governments, the regulations under which the tribe operates, and the reporting requirements which the tribe must fulfill. Neither of these parties normally consults with the financial people, the accountants, until after the contract is negotiated and signed. This failure to involve the people who are normally the most knowledgeable about both the gaming industry and the tribe’s regulatory and reporting environment often causes grave difficulties after the fact. The accountant can provide expertise on a variety of issues that can make the contracting process more successful. The rest of this section addresses issues that lawyers typically forget to consider in drafting the contracts between tribes and a prospective management company.

Issue 1 – The definitions of income

All management contracts provide for compensation of the management company based on a percentage of “income”. The problem with most contracts is getting a clear definition of “income”. Obviously it is critical for each party to have a clear understanding of this figure to prevent future arguments about the amount of profit due to each party.

Net profit is usually determined under generally accepted accounting principles (GAAP) and every accountant thinks they know what that means. However, there are some significant pitfalls that are encountered because the tribe and its tribal enterprises do not fall under normal commercial GAAP.

The determination of income is also crucial because of the constraints imposed by IGRA on the maximum amount of the management fee. IGRA states

(1) The Chairman may approve a management contract providing for a fee based upon a percentage of the net revenues of a tribal gaming activity if the Chairman determines that such percentage fee is reasonable in light of surrounding circumstances. Except as otherwise provided in this subsection, such fee shall not exceed 30 percent of the net revenues.

(2) Upon the request of an Indian tribe, the Chairman may approve a management contract providing for a fee based upon a percentage of the net revenues of a tribal gaming activity that exceeds 30 percent but not 40 percent of the net revenues if the Chairman is satisfied that the capital investment required, and income projections, for such tribal gaming activity require the additional fee requested by the Indian tribe.

This makes IGRA’s definition of net revenues critical to the contract. However, IGRA’s definition of net revenues is not in accord with other accepted accounting and gaming definitions of income provided by the American Institute Of Certified Public Accountants (AICPA) and the National Indian Gaming Commission (NIGC).

The AICPA Industry Audit Guide Audits of Casinos, (AICPA 2000) is one of the most authoritative accounting pronouncements for the gaming industry. It provides certain key definitions that commonly are relied upon in the casino industry, including a definition for
gross gaming revenue that is used by the non-Indian gaming industry. The NIGC, which is the federal oversight body for Indian gaming, includes a definition of gross gaming revenues in their Minimum Internal Control Standards (MICS). Table 1 provides a summary of these various definitions.

The AICPA definition and the NIGC definition are both definitions of gross win from gaming although significant differences exist between the two definitions. The NIGC definition encompasses a much broader range than the limited definition of the AICPA. For example, it incorporates such things as poker, tournament and players’ pool gaming. It also incorporates prize payouts for other than cash.

The IGRA definition is quite different from those of the AICPA and NIGC above. Net revenues are defined as gross revenues of an Indian gaming activity less amounts paid out as, or paid for, prizes and total operating expenses, excluding management fees. This definition differs from an accountant’s understanding of the term net revenue. It equates more closely to an adjusted net income or profit.

These definitions of income assume importance in the contracting process when they are used as the basis for fees paid to an investor or management company. Generally, the tribes would be unwilling to base a management fee on gross gaming revenues as defined above. The manager is responsible for managing all revenues and operating expenses. Basing incentive payments on gross revenues would therefore not encourage a manager to control operating expenditures. Quite the opposite. The manager would seek to spend dollars on promotional and advertising activities to enhance the gross revenues.

There are some contracts in the gaming industry, which are based on gross gaming revenues. Generally these are gaming machine participation contracts in which a gaming machine supplier provides gaming machines for use by the tribal casino and shares in the gross gaming win from those machines. In the case of most reputable gaming machine suppliers, the nature of these contracts is clear in that the supplier does not have any management obligations with respect to the machines. The involvement is passive and may involve only such things as ongoing maintenance contracts.

In the case of non-recognized suppliers of gaming machines, there is a less clear distinction between a participation lease and a management contract. Typically in jurisdictions where gaming operations are subject to disputes over legality, many tribes were offered a package deal. That package deal was as follows: “We’ll build the casino for you, you sign a note. We’ll supply you with the machines and you sign a participation agreement. We’ll supply you the expertise and you sign a consulting agreement.”

Many tribes signed these types of agreement in their start up stages of development. They ended up paying interest on the note, a percentage of gross revenues on the participation agreement and a further monthly fee on the consulting contract. The net result was a management contract that did not conform to the requirements of IGRA.

IGRA’s definition is close to net profit figure or revenue minus expenses before deduction of the management fee. It leaves unresolved the question of how this figure should be determined. That problem is compounded because the entity in question is part of an Indian tribe for the reasons discussed in Issues 2 and 3.

Issue 2 Which GAAP?

In determining net income, it is important to remember that a tribal casino is a controlled entity of the tribal government. Particularly in the US, this subjects the casino to a different set of accounting standards than a private sector enterprise of a similar nature. In the United
States, state and local governmental entities and their controlled organizations are subject to the standards of the Government Accounting Standards Board (GASB). Commercial entities are subject to the standards of the Financial Accounting Standards Board (FASB).

The standards issued by each of these bodies contain many similarities but there are areas where significant differences exist for the computation of income. There are also some areas where there is doubt about the applicability of certain standards, which can materially affect the computation of income. These are discussed below. It is important that any contract clearly states what treatment is to be accorded to these items in determining the basis for the allocation of profits. They also need to be clarified in order that the maximum allocation basis described above under IGRA is not accidentally breached.

Under GASB Statement No. 20 (GASB 1993), enterprise funds of governmental entities must follow GASB accounting principles and may follow FASB principles issued after November 30, 1989 unless they conflict with GASB pronouncements. The superficial influence of this does not appear to be highly significant except in the structure of the foot of the income statement and the classification in the cash flow statement.

As shown in Figure 1, under a GASB income statement, distributions to the casino owner (the tribe) are classified as being above the “bottom line”. They are operating transfers and under the GASB presentation they come before the bottom line net income for the year. In a commercial income statement, they are dividends or distributions and are deducted after arriving at net income for the year. Not a major issue as long as the contract with an investor clearly specifies this issue subject to our discussion below on related party transfers.

The GASB cash flow statement is structured in a significantly different fashion from its FASB counterpart. The required use of the direct method for computing cash flows from operations makes that statement look different but has no effect in reality except for the crucial fact that two major operating items are classified differently under the GASB presentation. These two items are interest expense and investment income. Although these are potentially crucial issues in determining the basis for financial ratios that may be contained in lending documents, this issue is beyond the scope of this paper.

The FASB vs GASB standards conflict is further complicated by the presence of a third party in the standard setting process. Increasingly, the American Institute of Certified Public Accountants (AICPA) has been issuing accounting standards. The AICPA submits these standards to the FASB and the GASB for approval and they become effectively mandatory when either body approves them.

The AICPA has issued some significant standards in the form of Statements of Opinion (SOPs). Most of these SOPs have been approved by FASB, but almost none of them have been approved by GASB. The probable reason for this is that the GASB did not see the relevance of adopting these documents. However, until recently, the GASB also forgot about Indian tribes and their special situation.

These SOPs contain areas that cause significant disclosure issues, but they also include areas involving measurement principles. Many of these SOPs are for esoteric situations but one in particular is highly significant in the gaming industry. That statement is SOP 98-5 Accounting for Start up Costs (AICPA 1998).

There are substantial start up costs in implementing a new tribal casino operation. Under SOP 98-5, commercial casinos must write off in the year in which they are incurred all start up costs that do not meet the definition of property, plant and equipment. Traditionally start up costs were capitalized and amortized over a time period, typically five years. This change in accounting for start up costs affects tribal casinos in two ways.
The first issue is the applicability of SOP 98-5 to the financial statements of a governmental enterprise. That issue is in doubt since GASB has not approved the statement although FASB has done so.

The second issue is how to account for the start up costs. If the casino takes the attitude that it can capitalize these costs prior to opening and then amortize them, the amortization expense will form part of the operating costs each year for the determination of net income. Alternatively, the casino could decide to arbitrarily adopt SOP 98-5 and write off the costs prior to opening. If that approach is adopted, these costs might never enter into the determination of net operating income because they were written off prior to the commencement of operations. This is a highly significant matter relating to the development of tribal casinos. Tribes need to ensure that they receive appropriate allowance for the costs incurred prior to the opening of the casino. The management company will certainly include these charges in the amount of any outstanding development loan.

**Issue 3 Regulatory and other related party costs.**

The potential for manipulation of income of any controlled entity through related party transactions is not unique to tribal casinos. This can occur in any controlled commercial operation. However, there are some unique features in the tribal situation.

Firstly, the tribes are required to implement their own regulatory system for the operation of gaming. This regulatory system is in addition to that imposed by the National Indian Gaming Commission and, in most jurisdictions, a state regulatory gaming agency. Tribal gaming regulation is typically implemented through a Tribal Gaming Commission and/or Tribal Gaming Agency.

Because these are agencies of the tribe and are intended to be independent of the gaming operation, the costs of regulation are costs of the tribe and not the gaming operation. Naturally, these costs are commonly charged back in some way to the gaming operation but the manner of accounting for such costs and the items included in the costs are very crucial in determining their treatment for management contracts.

The treatment of the Gaming Commission costs in financial statements varies significantly. In some tribes a charge is made to the income statement for “regulatory fees”. This item then becomes an expense of the casino in determining net income. This treatment is the simplest but whether it complies with IGRA which requires the Commission to be independent of the gaming operation is questionable.

Other tribes obtain reimbursement of the costs of the Commission though distributions from the gaming operation to the tribe. The distinction is important since the costs of the Commission become operating transfers or distributions to the tribe. Our earlier discussion stated that these items should be excluded from the determination of income. We are now saying that these are necessary costs caused by the gaming operation and should therefore enter into the determination of net income in a management contract.

The costs included within the gaming regulatory budget have been increasing. The Gaming Commission operations include the Surveillance department, the costs of Internal Audit and also some functions that might traditionally have been included under security. The Commission and related Agency have become a major cost center. Tribes must ensure that these costs are included as allowable expenses in determining net income for the basis of allocation of profits under a management contract.
Other related party costs that could affect the determination of net income include the value of free use of tribal land, roads or other facilities. The tribe should determine whether some charge is to be included for the use of such assets. If a charge is included, it may affect net revenues as defined under IGRA and, in turn, the amounts that can be paid to the management company.

An additional related question is where, if anywhere, to capitalize the casino buildings? When many tribes started their casino developments, the only accounting records that existed were those of the tribal government. Often the costs of development of the casino and the casino construction were lost within the general fund accounting of the tribal government. Most tribes did not maintain a general fixed asset account group to identify the cost of the casino project. The costs were charged off as expenditures as incurred. No transfer of fixed assets to the casino enterprise fund was ever recorded. As a result the true cost of the fixed assets was never recorded in the casino and the amount allowed for depreciation each year was a significantly understated figure resulting in an overstatement of net revenues.

The tribes’ taxing rights also need to be clearly specified in any contract. Many tribes have taxing rights over enterprises operating on the reservation. For example, a tribe imposes a sales tax for the sale of tobacco or other goods. Do those rights to tax extend to the tribal gaming operation? If so, how are such revenues and expenses to be treated in the allocation of income between a tribe and a management company? Other tribes charge a fee for major contractors doing business with the casino. In some cases this is in the form of a gaming license. Should this income be considered strictly tribal income, or is it income from gaming operation? If it is gaming income, then it affects the management contract.

Conclusion

The present paper has focused on some limited aspects of contracting between a tribe and a management company. Doing business in general with tribes can be fraught with difficulty unless the unique and complex environment of tribal operations is clearly understood and thought through. There have been successful partnerships between tribes and non-tribal management companies but they are the exception rather than the rule. Promoting a successful relationship goes beyond mere commercial considerations. Consideration of culture and fit between a manager operator and the tribe contribute to the promotion of good business relations. Knowledge of what can go wrong at the outset also helps in avoiding disastrous consequences at a later stage.
References


Table 1

<table>
<thead>
<tr>
<th>Authoritative Source</th>
<th>Term</th>
<th>Definition</th>
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</thead>
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<tr>
<td>Indian Gaming Regulatory Act 25 U.S.C. 2703 [SEC.4]</td>
<td>Net revenues</td>
<td>Gross revenues of an Indian gaming activity less amounts paid out as, or paid for, prizes and total operating expenses, excluding management fees</td>
</tr>
<tr>
<td>AICPA Audit Guides of Casinos</td>
<td>Gross gaming revenue (win)</td>
<td>The net win from gaming activities, which is the difference between gaming wins and losses before deducting costs and expenses</td>
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<tr>
<td>NIGC Minimum Internal Control Standards</td>
<td>Gross gaming revenue</td>
<td>Annual total amount of money wagered on Class II and Class III games and admission fees (including table or card fees), less any amounts paid out as prizes or paid for prizes awarded</td>
</tr>
<tr>
<td>FASB Concepts Statement # 6</td>
<td>Comprehensive income</td>
<td>The change in equity of a business enterprise during a period from transactions and other events and circumstances from nonowner sources. It includes all changes in equity during a period except those resulting from investments by owners and distributions to owners.</td>
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### APPENDIX 1 – FASB v GASB INCOME COMPUTATIONS

#### MYTHICAL GAMING PALACE

**INCOME STATEMENT (FASB BASIS)**
**YEAR ENDED DECEMBER 31, 2001 AND 2000**

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2000</th>
<th>Notes</th>
</tr>
</thead>
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<tr>
<td><strong>Revenues</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Net gaming win</td>
<td>24,222,283</td>
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<tr>
<td>Food and beverage</td>
<td>885,474</td>
<td>1,109,806</td>
<td>F</td>
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<tr>
<td>Gift shop</td>
<td>468,436</td>
<td>515,445</td>
<td>F</td>
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<tr>
<td>Commissions and other</td>
<td>8,965</td>
<td>66,878</td>
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<tr>
<td><strong>Total revenues</strong></td>
<td>25,585,158</td>
<td>23,315,326</td>
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<tr>
<td>Less Promotional allowances</td>
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<td>(1,205,389)</td>
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<td><strong>Net revenues</strong></td>
<td>24,367,532</td>
<td>22,109,937</td>
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<td><strong>Cost of sales</strong></td>
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<td>Food and beverage</td>
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<td>Gift shop</td>
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<td>Operating departments</td>
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<td>Depreciation</td>
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<td>Administrative expenses</td>
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<td>Management fees</td>
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<td>Write off start up costs</td>
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<td>1,326,391</td>
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<td>Regulatory fees</td>
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<td>15,899,571</td>
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<td><strong>Other Income (Expense)</strong></td>
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<td>Interest and other income</td>
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<td>Interest expense</td>
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<td><strong>Total other income (expense)</strong></td>
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<td>(606,508)</td>
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<td>Less taxation</td>
<td>(1,600,000)</td>
<td>(1,500,000)</td>
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<td><strong>Net income after taxation</strong></td>
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<td>4,103,638</td>
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<td>Owners' Equity, as of January 1</td>
<td>4,446,726</td>
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<td>Dividends paid</td>
<td>(4,900,000)</td>
<td>(5,570,000)</td>
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<td>Owners' Equity, as of December 31</td>
<td>$ 4,187,055</td>
<td>$ 4,446,726</td>
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</tr>
</tbody>
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## MYTHICAL TRIBAL GAMING PALACE
### INCOME STATEMENT (GASB BASIS)
#### YEAR ENDED DECEMBER 31, 2001 AND 2000

<table>
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<tr>
<th>Revenues</th>
<th>2001</th>
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<td><strong>23,315,326</strong></td>
<td></td>
</tr>
<tr>
<td>Less Promotional allowances</td>
<td>(1,217,626)</td>
<td>(1,205,389)</td>
<td></td>
</tr>
<tr>
<td><strong>Net revenues</strong></td>
<td><strong>24,367,532</strong></td>
<td><strong>22,109,937</strong></td>
<td></td>
</tr>
</tbody>
</table>

| Cost of sales                  |            |            |       |
| Food and beverage              | 1,138,615  | 811,529    |       |
| Gift shop                      | 411,372    | 383,317    |       |
| **Operating expenses**         |            |            |       |
| Operating departments          | 6,944,831  | 5,837,377  | E     |
| Depreciation                   | 910,062    | 1,280,805  | A     |
| Administrative expenses        | 3,815,754  | 2,464,594  | A     |
| Management fee                 | 1,611,032  | 1,706,526  | F     |
| State regulatory fees          | 2,494,471  | 1,927,898  | D     |
| **Total costs and expenses**   | **17,326,137** | **14,412,046** |     |

| Operating income               |            |            |       |
| **Operating income**           | **7,041,395** | **7,697,891** |     |

| Other Income (Expense)         |            |            |       |
| Write off start up costs       | (265,278)  | (265,278)  | C     |
| Interest and other income      | 138,011    | 77,492     |       |
| Interest expense               | (470,000)  | (684,000)  |       |
| **Total other income**         | (597,267)  | (871,786)  |       |

| Net income for the year before operating transfers | 6,444,128 | 6,826,105 |

| Operating transfers to the Tribe |             |             |       |
| Tribal Gaming Agency            | (1,600,000) | (1,500,000) | D     |
| Other distributions             | (4,900,000) | (5,570,000) | E     |
| **Total transfers**             | (6,500,000) | (7,070,000) |       |

| Net loss for the year after operating transfers | (55,872) | (243,895) |

| Tribal Members' Equity, as of January 1 | 5,669,193 | 5,913,088 |
| Tribal Members' Equity, as of December 31 | **$ 5,613,320** | **$ 5,669,193** |
NOTES TO PRESENTATION

NOTE A No land (or lease cost of land) has been allocated to the non-tribal casino. The tribal casino typically operates on tribal lands for which no rental is charged. The buildings are presumed to be in the tribal casino financial statements.

NOTE B Operating expenses for the tribal casino are likely to be lower than a commercial casino in each year because costs for departments such as surveillance and internal audit will be included as part of the tribal gaming agency. See Note E below.

NOTE C It is presumed that the GASB casino does not adopt the terms of SOP 98-5 and defers and amortize the start up costs over a period of time. The applicability of SOPs to governmental entities is uncertain. The location of these costs is also important for the purpose of computing management fees under a management contract. See discussion in paper.

NOTE D It is assumed that a non-tribal casino pays the same state regulatory costs as the tribal casino. That issue will depend on the tribal/state compact agreement and state regulation. It is also assumed that the non-tribal casino does not have an equivalent to a tribal gaming agency or commission. To equate for this an equivalent amount has been charged as federal and state income tax. The tribal casino is not subject to state or federal income taxation.

NOTE E Distributions to owners under the non-tribal model are typically dividends or withdrawals. They are allocations within the statement of movements on stockholders' equity. Under the governmental model, the distributions are operating transfers to “another” fund of the government. They fall within the scope of the income statement and are not excluded as movements on equity. In addition the cost of tribal regulation are required to be borne by the tribe. These costs are usually reimbursed in some manner by the casino. We have identified them separately here but normally they would be a part of the operating transfer to the tribe. The costs charged might differ from actual costs of the regulatory agency. In addition there is considerable variation in the scope of what comprises the regulatory agency. Areas such as surveillance, internal audit and investigation are typical areas where there is scope for variability. These costs would be an expense of a typical commercial casino. We have not included any costs for operating elements, such as surveillance, included within the tribal regulatory agency although, virtually certainly, they will exist.

NOTE F The tribe might impose sales and use tax on certain areas of casino operations such as food and beverage or tobacco sales. These may not affect the profitability of these departments but they are an important consideration in the overall return of profit to the tribe.

NOTE G The management fee has been computed as 20% of net income before operating transfers, taxation and payment of the management fees in each case.
Group telephone counselling for problem gambling behaviour

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Abstract

The aim of this study was to develop, implement and evaluate a counselling program designed for problem gamblers, provided to small groups of clients using the telephone as the delivery medium. Groups met once a week for six weeks, using the telephone as the method for counselling delivery. The groups were facilitated by counsellors who had skill and experience providing counselling in both face-to-face and group counselling settings as well as in the use of the telephone as the means for counselling delivery. Counsellors also possessed a detailed knowledge of gambling in Australia and the application of counselling techniques for problem gambling behaviour. Subjects were requested to complete questionnaires that assessed their gambling attitudes and behaviours and psychological mood states at three time intervals: (1) pre-program; (2) one week following completion of the program; and (3) at 6-month follow-up. Group members reported significant improvement in their: attitudes towards gambling, gambling behaviour, confidence in their ability to resist gambling urges, state and trait anxiety levels and psychological mood states following completion of the program and at 6-month follow-up when compared with pre-program measures. The results suggest the group program, comprising cognitive and behavioural treatment strategies within a humanistic counselling framework and delivered using the telephone, was highly effective in helping group members reduce their gambling difficulties.

Introduction

Face-to-face counselling is the most “popular”, in terms of the community’s perception of how counselling is normally delivered. This “popular” conception of the counselling relationship incorporates the situation where a therapist or counsellor meets on a face-to-face basis with individual, couple or group clients. However, this concept fails to recognise the significant contribution that telecommunication facilities have made to the delivery of therapeutic counselling.
The telephone has been used to provide counselling for a number of decades (Hornblow, 1986, Hines, 1994). Perhaps the best-known telephone counselling service was established in London in 1953. The primary purpose of The Samaritans in setting up a telephone crisis counselling service was to assist people at risk of, or contemplating suicide (Varah, 1973). A telephone counselling service called Lifeline, very similar in philosophical outlook and service delivery to that established by The Samaritans, was established in Sydney in 1963 and currently has over 40 centres throughout Australia and over 200 in 14 countries throughout the world (Walker, 1984). These have been the model and impetus for many other telephone counselling and referral services. A wide range of therapeutic modalities to provide assistance to individuals and groups who experience a range of physical and psychological difficulties have been successfully provided without a therapist ever physically meeting their client.

**Generalist and specialist telephone counselling services**

The extent to which the telephone has been used to provide counselling is immeasurable. There are over 30 telephone counselling and referral agencies in Victoria alone that provide support for a wide variety of purposes. These include Crisis Line, Lifeline, Parent line, Mens Referral Service, Quit Line, G-line, Gay and Lesbian Switchboard, Women’s Information Referral Exchange and the Adoptive Parents Association help line.

These telephone-counselling services may be divided into two broad categories; Generalist and Specialist.

Generalist counselling services are those that target the whole community and provide counselling for the full range of personal or psychological difficulties which individuals may face. Life Line, while it specialises in the provision of counselling for people at risk of or contemplating suicide, falls into this category. It provides counselling for the full range of personal difficulties that individuals may face, including relationships, depression, anxiety, grief, mourning, low self esteem and physical and emotional abuse. Crisis Line is another example of a generalist telephone counselling service.

Specialist services either target a particular segment of the community, or they address a particular issue. Examples of the former include the telephone service operated by the Adoptive Parents Association and the Gay and Lesbian Switchboard. These are appropriately categorised as specialist telephone counselling services because they target a specific sector of the population. Although they offer counselling for a broad range of issues, including grief and loss, relationship difficulties, depression, these are generally oriented around the specialty of the service provider. Examples of the later include the Victorian Anti-Cancer Council’s Quit-line and G-line. Quit-line targets all members of the community for whom smoking is an issue and G-line targets those for whom assistance with gambling problems is required.

**Crisis counselling and continued support services**

The specialist category may be further broken down into two types of counselling service: crisis counselling and referral and continued support.

Crisis counselling and referral services target individuals in crisis, who need help at a particular point in time. Counselling provided to these clients is usually completely anonymous, as the client is not required to provide their name. The purpose of crisis counselling and referral services is to contain a difficult situation and provide a referral to a resource that may be able to provide further assistance. These counselling sessions are usually isolated occurrences. There is no undertaking to make continued contact and generally the therapist never becomes aware of the outcomes for the client.
Continued support services are those that offer on going counselling as required. They may receive their clients either directly or as a referral from a crisis counselling and referral service. Clients generally register with the service by providing their personal details. They then participate in regular counselling sessions, often with the same therapist but sometimes with different therapists. These are very similar in structure to normal face-to-face counselling services except they are conducted over the telephone so that the therapist and client may never physically meet.

Of the two types of counselling service described above, that are crisis counselling and referral services and those which offer continued support, only the later are able to offer telephone counselling in group settings. The term telecounselling has been used to describe the use of the teleconferencing principle to deliver group psychological counselling (Coman, 1997). The facilitator or therapist, as the central figure to the telecounselling model, is able to talk to a number of participants in telephone counselling. At the same time, each of the other participants is able to listen to and learn from the experiences of others.

Use of the telephone to provide counselling

Telephone counselling has been used for a variety of applications. It has been used on a one-to-one basis in the treatment of many psychological and psychiatric disorders, and in group settings. In one-on-one counselling, the telephone has been used for the provision of guided imagery for housebound agoraphobics (McNamee, O’Sullivan, Lelliott & Marks, 1989), and mobile telephones for the treatment of driving phobias (Flynn, Taylor & Pollard, 1992; Rovetto, 1983; Levine & Wolpe, 1980).

The telephone has been used to provide marital therapy (Hunt, 1993), family therapy (Hines, 1994; Springer, 1991) and in group settings to help clients quit smoking (Curry, McBride, Grothaus, Louie & Wagner, 1995). Smoking cessation has also been the focus of ongoing individual telephone counselling (Anderson, Duffy, Hallet, & Marcus, 1992; Lando, Hellerstedt, Pirie, & McGovern, 1992; Shiffman, Read, Maltese, Rapkin & Jarvik, 1985; Ossip-Klein, Shapiro & Stiggins, 1984; Dubren, 1977).

Telephone counselling has also been used to help overcome difficulties for visually impaired people (Jaureguy & Evans, 1983) and assist clients who suffer from panic disorder (Taylor, King, Margraf, Ehlers, Telch, Roth & Agras, 1989; Boyd, 1986) and panic disorder with agoraphobia (Swinson, Fergus, Cox & Wickwire, 1995; Swinson, Cox & Woszcyna, 1992).

Advantages and disadvantages of telephone counselling

Telephone counselling has a number of advantages and disadvantages over traditional face-to-face counselling delivery. These advantages and disadvantages differ depending on whether the telephone counselling is of the crisis counselling and referral type or of the ongoing therapy model.

The relative anonymity which telephone counselling affords is a distinct advantage of this mode of counselling service delivery (Evans, Smith, Werkhoven, Fox & Pritzl, 1986; Evans, Fox, Pritzl, & Halar, 1984). Clients who are well known in a community may be reluctant to seek face-to-face counselling from services located within the community. They are, however, able to anonymously access telephone counselling services, even those that may be based within the local community. Participants to telephone counselling groups are not anonymous to the therapist, as one person has to be responsible for initiating and coordinating calls. Participants are anonymous to each other and are encouraged to provide at least their first name for identification purposes. In such group settings, they are able to share as much or as little of themselves as they feel comfortable.
The anonymity and lack of physical presence may have other positive effects on group telephone counselling sessions. The anonymity afforded by telephone counselling may equalise the power structure which can develop in face-to-face group meetings (Evans et al., 1986) so that a participant’s physical size or the presence of a visible physical deformity do not influence an individual’s participation or others interaction with them. It has also been suggested that telephone counselling encouraged participants to talk, as this was the only means for communication available and lack of possible intimidation due to face-to-face contact (Evans et al., 1984).

The use of telephone counselling as a suitable mode of therapy delivery prior to or between face-to-face counselling sessions has been emphasised (Swinson et al, 1995; Flynn et al 1993). Clients resistant to attending face-to-face counselling for one or more reasons may be supported by telephone counselling until such time as they are ready for these sessions. Indeed, clients whose goal it is to attend face to face counselling but will not attend, for example due to agoraphobia, are particularly amenable to help via telephone counselling (Swinson et al., 1995). Telephone counselling has also been beneficial as a supportive net between face-to-face sessions (Coman, 1996; Flynn et al., 1993).

One of the advantages of telephone counselling not cited in the literature, but which the author has had reported in his work as a telephone counsellor, is the control and empowerment provided to clients by the telephone. Telephone clients have reported how much easier it is to be forthright and say what they feel over the telephone compared to face-to-face counselling. They have also expressed comfort with the relative ease with which they can terminate the telephone counselling session if they wish to do so. It is much easier to simply hang up from a telephone conversation than it is to walk out of a therapist’s office.

Increased client access to services is another major advantage, with clients able to access services from the comfort of their own home, or from work or from any place they have access to a telephone (Evans et al., 1986; Swinson et al., 1995; Zhu, Stretch, Balabanis, Rosbrook, Sadler, & Pierce, 1996). Telephone counselling has been demonstrated to be helpful in reducing the affective concerns of physically disabled people, which is sometimes the only viable intervention for affective problems, or inactivity-related complications for severely disabled clients (Evans et al, 1986). Swinson et al. (1995) concluded that a major benefit of telephone counselling was that people who would otherwise have been deprived of specialised care were able to access such care with minimal disruption to their lives. Telephone counselling is an ideal substitute for face-to-face counselling when the client has a mobility disability or when they live in a rural or isolated location.

The access issue is not only one of geography, as emphasised by Shepherd (1987), Springer (1991) and Hines (1994) emphasised the use of telephone counselling to bring participants in family therapy together from separated geographic areas. Access is also a function of time, being able to obtain help when required, without the necessity to join the end of a waiting list of possibly weeks before accessing professional help. The rationale behind the establishment of many of the crisis counselling and referral type telephone services was to provide immediate support to members of the community in crisis and provide as much support and assistance as able until face-to-face counselling is available (Hunt, 1993; Coman, 1996).

Time and travel savings are another advantage of telephone counselling over face-to-face counselling. There are minor administrative issues involving arranging group telephone counselling sessions but these are no greater than for arranging face-to-face meetings. Indeed, they may be less, as a venue does not require booking, thus freeing office space. There are no travel or other costs involved apart from the telephone call costs (Springer, 1991; Swinson et al., 1995). While no travel savings are realised for clients who are able to travel by their own means to community health centres, considerable savings may be achieved by providing telephone
counselling services to those clients who rely on community-funded taxis or dedicated minibuses to convey them to and from service appointments.

One of the other features about telephone counselling, particularly pertinent to on-going therapy provision, is that participants are able to change the location and telephone number on which they participate from one meeting to the next. There is no requirement that they participate from the same location each time.

While the obvious advantages of telephone counselling are numerous and substantial, the provision of telephone counselling does have limitations. As discussed briefly above, it is obvious that services that require physical contact, for example physiotherapy and occupational therapy, cannot be provided over the telephone. However, these types of services, while they may have a psychologically therapeutic effect, through informal discussions and social contact, are not counselling sessions. Swinson et al. (1995), following his use of telephone administered behaviour therapy to panic disorder with agoraphobia clients, commented that the time and cost savings of telephone counselling were reduced if pharmacological interventions were required in combination with the telephone counselling. These would still require the intervention of a medical practitioner who would either have to make a home visit or be visited by the client.

One of the obvious disadvantages of telephone counselling is the complete absence of non-verbal cues. There is no opportunity to evaluate body language or facial expressions (Hines, 1994). The only means for communication is aural, so that telephone counsellors need to be especially attuned to every sound, every silence, inflection and qualities of speech including tone, pitch and speed (Coman, 1996).

It is difficult to assess the effectiveness of telephone counselling services (Coman, 1996; Hunt, 1993), particularly crisis counselling and referral type services. Calls to these services are anonymous to the counsellor and generally do not have any mechanism for follow up to determine client outcomes after the call. In relatively uncommon occurrences, clients will call back telephone-counselling services to thank them for the assistance they provided. Such feedback is usually positive and is biased. Callers rarely call back to complain about service provision or that outcomes did not proceed as well as expected. The effectiveness of on-going individual and group counselling sessions is more easily evaluated and these form the bulk of the studies reported above.

It has been suggested that telephone counselling is limited to the delivery of cognitive and behaviour therapy. This is in part due to a combination of other limitations of this form of counselling delivery. The lack of visual, non-verbal cues makes it difficult to undertake psychotherapy and other forms of counselling interventions. In addition, the time limited nature of telephone counselling, particularly in the case of crisis counselling and referral type services, means they have to focus on brief intervention and problem focussed strategies, normally targeted at assisting the client with their current presenting problem. Clients who call a crisis telephone counselling service are unlikely to be receptive to ongoing psychotherapy or other non-cognitive or behavioural counselling modalities.

Hypothesis of Present Study
It is expected that individuals with self admitted gambling difficulties will report improved gambling attitudes and behaviours following participation in a specially designed six-week group counselling program.
Method

Subjects

One group of subjects participated in the study. They were 34 individuals who self reported to the Mental Health Foundation (Victoria) or the University of Melbourne Department of Psychiatry or who were referred to the program from one of the Break Even problem gambling counselling services.

All participants had some level of gambling difficulty. They were allowed to participate regardless of the level of gambling difficulty. Only gamblers participated. Family members and friends of problem gamblers were not permitted and were asked to participate in a dedicated group when a sufficient number had expressed interest.

The group was divided into three sub-groups. This was done on the basis of preference for meeting times. The three sub-groups had six participants each.

Participants lived in a range of geographic areas throughout Victoria, including metropolitan and rural locations. They represented all adult age groups, from 20-29 to 70+, with the most common age group being 50-59.

The program seeks to recruit 48 subjects and participant recruitment is ongoing at the time of writing.

Measures

A series of pencil and paper questionnaires were compiled into a survey instrument for completion by participants. These comprised:

- State-Trait Anxiety Inventory (STAI) (Spielberger, Gorsuch, Lushene, Vagg & Jacobs, 1983)
- Gambling Attitudes Survey (GAS) (Ohtsuka & Moore, 1998)

State anxiety is anxiety experienced from day to day and which fluctuates according to events and situations an individual may experience from time to time. Trait anxiety refers to a relatively stable level of anxiety proneness of an individual (Spielberger et al., 1983). An individual's anxiety level is likely to be influenced by stresses and concerns such as gambling difficulties, meeting financial commitments and resisting urges to gamble. The State-Trait Anxiety Inventory (STAI) (Spielberger et al., 1983) measures both state and trait anxiety levels of the individual (Spielberger et al., 1983) and was considered the most appropriate measure of subjects' state and trait anxiety levels.

The STAI state and trait scales each have 20 statements. These statements ask respondents to describe how they feel “right now” for the state scale and generally for the trait scale. Test-retest reliabilities are good (Spielberger et al., 1983) and internal consistency is high, indicating the measures are stable. The validity of the scale has been established by correlations with a number of other anxiety scales.

High trait anxiety scores have been correlated with a high number of self-reported problems, suggesting that the scale has potential as an instrument for identifying individuals likely to need and seek counselling assistance and health services (Spielberger et al., 1983). The scale has also been used in studies of the relationship between reported anxiety and psychological stress (Miller, 1979; Sarason et al. 1978; Brook, 1976).
The Gambling Attitudes Survey (GAS) (Ohtsuka & Moore, 1998) is a 19-item questionnaire that asks respondents to indicate the extent to which they agree or disagree with statements about their gambling attitudes. Items are scored on a five point scale from strongly disagree to strongly agree. The 19 items load onto five factors:

- Illusion of control (positive belief in good luck and the ability to win)
- Need for money (dependence on money from gambling)
- Control over gambling (perception of control over personal gambling behaviour)
- Belief in systems (belief in gambling systems)
- Cynicism about winning (belief that gambling is not an effective means for making money)

Alpha reliability coefficients for the scales are quite good, ranging from 0.85 for Illusion of Control to 0.53 for Cynicism about winning. No validity data is available for the scale at the time of writing.

In addition, respondents were asked to indicate on a scale of one to 100, where one represented no problem and 100 represented extreme or life threatening, how they would rate their gambling difficulties at that point in time.

Use of these measures enabled an examination of participants gambling attitudes and behaviours as well as anxiety status.

**Procedure**

The first stage of the study was the development of a six-session group telephone-counselling program for individuals with gambling difficulties. This was developed from a thorough review of the literature in the fields of problem and pathological gambling and group counselling. Consultation was also undertaken with psychologists and social workers employed at Victorian Break Even problem gambling counselling agencies.

A cognitive-behavioural approach was adopted given the research evidence that suggests this approach is helpful for individuals with habit or impulse control disorders such as problem gambling. In addition, additional research evidence suggests this approach can be delivered effectively using the telephone as a delivery modality. During the sessions, a history of gambling was taken followed by an exploration of participants’ myths and misconceptions about gambling. Information about gambling was provided, for example rates of return for different gambling types so that participants could make better informed choices about their gambling. In addition, harm minimisation strategies and alternative activities to gambling were explored. A more detailed description of the contents of each session will be the subject of separate papers.

Participants were allocated to groups on the basis of mutual availability. Thus, when six people had indicated the same time availability, for example, Thursday evenings, they were sent notification that their group would commence on a particular date.

In the week prior to the first session (Time 1), participants were sent information about the program, including the name of their counsellor and how they would be contacted by a Telstra operator 5 minutes prior to the commencement of each session. A survey instrument comprising the questionnaires described above was also sent, together with a reply paid envelope to enable the program’s evaluation. Finally, as the program formed part of a tertiary research degree, participants were also sent a Plain English statement and an Informed Consent Form. This informed participants that their participation was completely voluntary,
they could withdraw at any time and that face-to-face personalised counselling was available if required.

An identical survey instrument was circulated to participants immediately following completion of the final program session (Time 2), six weeks following commencement in the program. This comprised post program data. The same data was collected 6 months following completion of the six-week program (Time 3) to determine the extent to which any effects generated by the program persist over time.

Data Analysis

Data was entered into the SPSS program for PCs and computer scored and analysed. Score reversals were computer programmed where required and statistical data for each of the sub-scales was calculated. Paired samples t tests were calculated to compare the means of two variables for a single group. It computes the differences between values of the two variables for each case and tests if the average differs from 0. It is an appropriate statistical test in circumstances where before and after data is collected from the same subjects, the methodology employed for this study.

Data collected on the two time periods post program (immediately and six months later) was compared with that collected prior to participation.

Results

Table 1. Mean STAI scores at Times 1, 2 and 3

<table>
<thead>
<tr>
<th>Variable</th>
<th>Normative data Range</th>
<th>Time 1</th>
<th></th>
<th>Time 2</th>
<th></th>
<th>Time 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td>State Anxiety</td>
<td>38-41</td>
<td>55.5</td>
<td>13.0</td>
<td>41.3</td>
<td>9.7</td>
<td>38.9</td>
<td>10.0</td>
</tr>
<tr>
<td>Trait Anxiety</td>
<td>35-40</td>
<td>53.4</td>
<td>8.8</td>
<td>44.8</td>
<td>8.9</td>
<td>43.7</td>
<td>9.0</td>
</tr>
</tbody>
</table>

Subjects in the present study reported higher mean state and trait scores at Time 1 compared with STAI normative groups. Table 1 shows that subjects’ state and trait anxiety scores reduced between Time 1 and Times 2 and 3 to approximate normative scores. Statistical analyses of the differences between subjects’ scores and normative data could not be conducted as standard deviations for normative means were not available.

Paired-sample t tests were conducted to determine the significance of differences in mean scores reported between Time 1 and Times 2 and 3. The results of these analyses are shown in Table 2.
Table 2 Paired-sample t tests for STAI sub-scales

<table>
<thead>
<tr>
<th>Variable</th>
<th>Difference</th>
<th></th>
<th></th>
<th>2-tailed significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>t</td>
<td></td>
</tr>
<tr>
<td>State anxiety</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Times 1-2</td>
<td>14.6</td>
<td>13.8</td>
<td>6.0</td>
<td>p &lt; .001</td>
</tr>
<tr>
<td>State anxiety</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Times 1-3</td>
<td>16.1</td>
<td>12.3</td>
<td>7.4</td>
<td>p &lt; .001</td>
</tr>
<tr>
<td>Trait anxiety</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Times 1-2</td>
<td>9.09</td>
<td>7.6</td>
<td>6.8</td>
<td>p &lt; .001</td>
</tr>
<tr>
<td>Trait anxiety</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Times 1-3</td>
<td>10.3</td>
<td>3.56</td>
<td>7.2</td>
<td>p &lt; .001</td>
</tr>
</tbody>
</table>

Subjects’ mean state anxiety levels reduced significantly between Time 1 and Time 2 (14.6, $t = 6.0; p < .001$). State anxiety scores reduced further between Time 1 and Time 3 (16.1, $t = 7.4; p < .001$).

Table 3 shows mean scores and standard deviations for the five sub-scales of the GAS at Times 1, 2 and 3.

Table 3. Mean GAS scores at Times 1, 2 and 3

<table>
<thead>
<tr>
<th>Variable</th>
<th>Range</th>
<th>Time 1 Mean</th>
<th>S.D.</th>
<th>Time 2 Mean</th>
<th>S.D.</th>
<th>Time 3 Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illusion of Control</td>
<td>7 – 35</td>
<td>21.8</td>
<td>6.4</td>
<td>14.0</td>
<td>4.8</td>
<td>15.0</td>
<td>5.3</td>
</tr>
<tr>
<td>Need for Money</td>
<td>4 – 20</td>
<td>14.8</td>
<td>2.7</td>
<td>9.5</td>
<td>3.1</td>
<td>9.3</td>
<td>4.0</td>
</tr>
<tr>
<td>Control over Gambling</td>
<td>3 – 15</td>
<td>5.2</td>
<td>1.9</td>
<td>9.6</td>
<td>2.5</td>
<td>8.7</td>
<td>3.7</td>
</tr>
<tr>
<td>Belief in Systems</td>
<td>2 – 10</td>
<td>5.9</td>
<td>2.6</td>
<td>3.0</td>
<td>1.3</td>
<td>2.9</td>
<td>1.5</td>
</tr>
<tr>
<td>Cynicism about winning</td>
<td>3 – 15</td>
<td>9.0</td>
<td>3.0</td>
<td>12.1</td>
<td>2.1</td>
<td>11.6</td>
<td>2.2</td>
</tr>
</tbody>
</table>

The data in Table 3 show that scores for all GAS sub-scales changed in the hypothesised direction. Mean scores on Illusion of Control decreased between Time 1 and Time 2 then increased between Time 2 and Time 3. Control over Gambling and Cynicism about Winning scores increased between Time 1 and Time 2 and decreased between Time 2 and Time 3. Mean scores on the Need for Money and Belief in Systems sub-scales decreased as hypothesised.

Paired-sample $t$ tests were conducted to determine the significance of differences between scores reported at Time 1 and Times 2 and 3. The results of these tests are shown in Table 4.
Table 4 Paired-sample $t$ tests for GAS sub-scales

<table>
<thead>
<tr>
<th>Variable</th>
<th>Difference</th>
<th>$t$</th>
<th>2-tailed significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Illusion of Control</td>
<td>7.7</td>
<td>5.5</td>
<td>8.0</td>
</tr>
<tr>
<td>Times 1-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illusion of Control</td>
<td>6.8</td>
<td>5.8</td>
<td>6.6</td>
</tr>
<tr>
<td>Times 1-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need for Money</td>
<td>5.3</td>
<td>3.7</td>
<td>8.1</td>
</tr>
<tr>
<td>Times 1-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need for Money</td>
<td>5.5</td>
<td>3.3</td>
<td>9.3</td>
</tr>
<tr>
<td>Times 1-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control over Gambling</td>
<td>-4.4</td>
<td>2.4</td>
<td>-10.3</td>
</tr>
<tr>
<td>Times 1-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control over Gambling</td>
<td>-3.5</td>
<td>3.8</td>
<td>-5.2</td>
</tr>
<tr>
<td>Times 1-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belief in Systems</td>
<td>2.8</td>
<td>2.3</td>
<td>7.1</td>
</tr>
<tr>
<td>Times 1-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belief in Systems</td>
<td>2.9</td>
<td>2.3</td>
<td>7.0</td>
</tr>
<tr>
<td>Times 1-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cynicism about Winning</td>
<td>-3.0</td>
<td>2.1</td>
<td>-7.9</td>
</tr>
<tr>
<td>Times 1-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cynicism about Winning</td>
<td>-2.6</td>
<td>2.5</td>
<td>-5.9</td>
</tr>
<tr>
<td>Times 1-3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The data in Table 4 show there were significant differences in subjects’ reported attitudes towards gambling between Time 1 and Time 2 and Time 3 as measured by the GAS sub-scales.

Severity of gambling impact

Severity of gambling impact was measured using a single visual analogue scale question. Subjects indicated on a scale of one (“no problem”) to 100 (“extreme or life threatening impact”) the severity of impact that gambling was having on their life. Table 5 shows the mean and standard deviation of severity scores at Times 1, 2 and 3.

Table 5. Mean severity of gambling impact at Times 1, 2 and 3

<table>
<thead>
<tr>
<th>Variable</th>
<th>Time 1 Mean</th>
<th>SD</th>
<th>Time 2 Mean</th>
<th>SD</th>
<th>Time 3 Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity of gambling impact</td>
<td>65.2</td>
<td>14.8</td>
<td>21.6</td>
<td>13.3</td>
<td>22.5</td>
<td>16.2</td>
</tr>
</tbody>
</table>

The data in Table 5 show there was a reduction in the mean severity of impact of gambling between Time 1 and Time 2 with an increase in mean scores between Time 2 and Time 3.

Paired-sample $t$ tests were calculated to determine the significance of differences in severity of gambling impact scores between Time 1 and Times 2 and 3.
Table 6 Paired-sample $t$ tests for severity of gambling impact

<table>
<thead>
<tr>
<th>Variable</th>
<th>Difference Mean</th>
<th>$t$</th>
<th>2-tailed significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity of gambling impact Times 1-2</td>
<td>43.8</td>
<td>17.2</td>
<td>$p &lt; .001$</td>
</tr>
<tr>
<td>Severity of gambling impact Times 1-3</td>
<td>42.9</td>
<td>15.4</td>
<td>$p &lt; .001$</td>
</tr>
</tbody>
</table>

The data in Table 6 show that the reduction in subjects’ self-reported levels of severity of gambling impact between Time 1 and Time 2 ($t = 17.2; p < .001$) and between Time 1 and Time 3 ($t = 15.4; p < .001$) were significant. Perceived severity of gambling impact reduced significantly following subjects’ participation in the program, providing support for the effectiveness of the program.

**Discussion**

It appears the six-week group telephone-counselling program for problem gamblers had a positive effect on participants gambling attitudes and behaviours. There were significant reductions in overall life difficulties associated with gambling as well as state anxiety levels and trait anxiety between Time 1 and Time 3. Significant improvement in cynicism about winning and a significant reduction in the need for money from gambling were also recorded. Interestingly, there were initial but non-significant improvements in the concept of control, measured by Gambling Attitude Scale sub-scales Illusion of Control and Control over Gambling. Both scores increased to some extent between Times 1 and 2 but then dropped at the six-month follow-up, Time 3. It may be that dimensions of control are resistant to change or require more direct interventions than those available via telephone counselling. Further research is required to determine these possibilities.

Other data for the effectiveness of the program was gathered through participants written comments, offered without solicitation at Time 2 following completion of the program. Participants indicated their overwhelming satisfaction with the program, indicating they felt “enlightened” and “unburdened” to be able to share their difficulty with others in a similar situation in an anonymous and unthreatening way. They were also full of praise for the counsellors who conducted the groups, for their skill in group facilitation, their knowledge of problem gambling and their ability to provide information about gambling and suggest a range of cognitive and behavioural strategies to reduce participant’s gambling difficulties. They appreciated the active support and advice available from other participants.

There are a number of limitations to the study that must be considered prior to generalising results. One limitation to date is the small sample size. Only 34 people participated in the program so any generalisation of these results to the wider population of problem gamblers must be done with caution. Participants also self-selected for participation in the study and so are not a completely random sample of problem gamblers. It should be noted however that all clients to face-to-face individual and group counselling programs for problem gamblers self-select and therefore there is no evidence that participants to the study are dissimilar from other problem gambling counselling service clients.

Another potential limitation of the study is the lack of validity data for the Gambling Attitudes Survey (Ohtsuka & Moore, 1998). The items appear to have good face validity and items have generally good factor loadings for the factors to which they contribute. However,
further research to determine the criterion validity of the sub-scales and the scale as a whole is required to ensure they actually measure what they purport.

Despite these limitations, the data suggests agencies that provide group counselling interventions for problem gamblers may seriously consider using group telephone counselling as an alternative mechanism for service delivery. The advantages of such an approach, especially providing access to clients who might not otherwise attend for counselling sessions, was highlighted by participants. In addition, the success of telephone counselling demonstrated for individuals with gambling difficulties suggests that group telephone counselling may also be attempted and trialled for other psychological disorders.
References


Strategies for change: Developing a self-help handbook for culturally and linguistically diverse clients
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Abstract
Gambler’s Help Southern’s specific multicultural services attempted to identify a method of improving access to assistance for clients from culturally and linguistically diverse backgrounds. Client data within the program’s catchment suggested that although we were seeing a representative proportion of clients from culturally and linguistically diverse backgrounds, many clients did not access services that were available to them. The current paper details the conception of, and process for developing, a self-help handbook specifically for clients from diverse cultural and linguistic backgrounds. A self-help handbook was considered appropriate as it provided both general information and also specific strategies for individuals to take away without necessarily having professional involvement. Methods used for the development, implementation and evaluation of the manual are detailed. Aspects of service access, cultural conceptions of treatment processes and collaborative work with culture specific agencies are also discussed. The self-help handbook has been translated into eleven languages for use by both gambling specific and culturally specific workers. Ongoing discussions continue regarding further development of the handbook.

Introduction
As part of its mandate, Gambler’s Help Southern is required to address the needs of culturally and linguistically diverse (CALD) groups in southern region. The service directly devotes 20% of its resources to servicing CALD groups, and in addition all staff carry a percentage of CALD service provision.

Client data indicate that Gambler’s Help Southern sees percentages of culturally and linguistically diverse people in proportion with their representation amongst the broader Victorian population. The majority of multicultural groups consistently identify gambling as a significant issue, but
evidence is often anecdotal and some culturally and linguistically diverse groups tend to either deny the problem exists in their community or fail to access the service. There are many reasons for this, including lack of workers who speak their language, guilt and shame about their gambling, religious and cultural prohibitions on gambling, perceiving counselling as of no value, or failing to understand what counselling can provide.

The problem gambling self-help manual developed from an intention to offer services to those individuals who might not access services but still needed information, support and possibly referral. The agency was able to secure one off funding from the Community Support Fund via the Department of Human Services to facilitate the development of the self-help manual, poster and associated training process. The manual was designed for use by both service providers at community agencies and individuals seeking assistance.

Overview of Approach Employed

The problem gambling self-help manual was initially an English language document written by Gambler’s Help Southern counsellors and distributed to clients in an unpublished (photocopied) form. This document was condensed and simplified into a shorter, more culturally relevant and appropriate format by the Gambler’s Help Southern Multicultural Services Team.

A consultative / training model of development, implementation and evaluation was used to gain input from CALD workers at a range of agencies. These workers are involved in identifying presenting issues amongst their clients, and also responding to their needs. They were seen as best placed to judge whether the manuals were culturally relevant and sensitive as well as correctly translated. An initial draft was circulated for consideration, followed by extensive interviewing of participants. In this way, community organizations were key drivers of alterations and enhancements to the original document. Having consulted with these workers in developing the manuals, Gambler’s Help Southern staff later returned to equip them with the problem gambling self help manual for distribution amongst the community and to train them in providing counselling using the manual as a tool.

Development Process

The process of developing the problem gambling multicultural self-help manual and poster consisted of the following stages:

1. Identifying target groups
2. Redeveloping content and art work of the manual
3. Identifying bilingual community service providers
4. Engaging in the consultation and translation process
5. Printing
6. Multicultural Poster
7. Distribution and training

Identifying Target Groups

The target groups were identified through examining ABS population data the program’s catchment area. The final target language group list covered the six largest cultural groups believed most likely to benefit from a first language self help manual. They were: Greek, Italian, Spanish, Russian, Hungarian and Turkish. Although German and French were amongst the highest population groups in the catchment area, it was assumed that they would be sufficiently
literate in English not to require a specific manual. Additionally, five languages spoken by bilingual counsellors at Gambler’s Help Southern were included for translation (Arabic, Croatian, Chinese, Polish and Vietnamese). These communities exist in significant numbers within the catchment or nearby, and might be encouraged through the manual or culture specific agencies to contact a first language Gambler’s Help Southern service provider.

**Content and Artwork**

To develop the content of the multicultural manual, the team utilised material from the existing Gambler’s Help Southern self help handbook ‘Strategies for Change’. The team modified this handbook by rephrasing, eliminating jargon and simplifying text to produce practical, friendly, easy to understand, culturally and linguistically relevant material. Information was added to make the manual more informative for target groups and provide users with more options (eg. Information, “What is counselling?” and “What is a financial counsellor?”). All adjustments were then compiled and a draft of the English version completed.

To support the text and enhance understanding and attractiveness, the team explored various options for illustrations and artwork. After evaluating a variety of computer art programs, appropriate graphics were inserted into the manual. Symbols and caricatures are used throughout the handbook and on the poster to minimise possible offensive images or associations. Similarly, the manual focuses on both simple language and illustrations to reduce age, gender and ethnicity factors affecting individuals’ responses to the content. Later in the process, the printing company assisted the team in the manual’s cover design. The design encompasses a stylised rendering of two dice, obscured to ensure the manual is not overly identifiable as gambling related.

The structure of the handbook was designed to allow for its easy use by community workers. Each page of all language versions of the manual is an exact content duplicate, so that no matter which section or language version was used both individuals would be reading and using the same content. Theoretically, this meant that a worker could use the English version whilst a client read the information in his or her own language. This structure was also carried through for symbolic languages such as Chinese.

Case illustrations were used to emphasise important issues for culturally and linguistically diverse groups. These issues included settlement and migration experiences, focus on family involvement, isolation and specific cultural issues such as concepts of dishonor, shame and stigma.

Language factors were also emphasised on a number of levels; as a barrier to attending counselling but also as something that gambling overcomes by not requiring language skills and so providing an inviting environment.

Case studies also illustrated the progression of problem development and possible means to seek help or resolve difficulties. Creating greater identification with content was attempted by altering names in case studies to reflect particular community groups, eg Mary was used within the English version whilst Tatiana was used in the Russian version.

Practical content included information about financial counselling and general counselling produced in a manner that defined the process and demystified what occurs during sessions. The material was explained simply to reduce fear, as the term “counselling” for different cultures had multiple meanings ranging from “what crazy people have to do” to “police interrogation procedures”. Explanation was geared to making clear what could be expected from the process.
Along with these factors, information was also provided about specific topics, such as defining a gambling problem and the process of change.

Important areas for attention were family strategies for self support and support of the gambler. Most of the targeted cultures placed family both high on their list of priorities and also as sources of conflict or support. Commonly, family (spouse or other significant individuals) were the people who sought support for emotional and financial difficulties gambling was causing. There was a felt need to emphasise the constructive role family members could play, but also the need for self-protection.

Focusing on concrete, practical strategies, ideas and “advice” was identified by community agencies as highly important. Through the referral and counselling process, there is much “investment” in the authority and prestige of the counsellor by both family and individuals. Attendance at counselling has a focus on being educated/taught/informed and provided with information and “advice” which will solve their problems. Practical strategies are thus often useful for developing rapport and helping the counsellor gain credibility with the client or family. This process also empowers individuals to “do something” about the issues.

Examples of practical strategies can be seen throughout the handbook, and include information about problem gambling development and progression, direct strategies about money management and the importance of self care.

Identifying Bilingual Community Service Providers

To develop culturally and linguistically appropriate manual, the team consulted community workers with the draft English document. Service providers representing the six main community languages in the Southern Region were identified for this task. These included:

1. Greek (South Central Region Migrant Resource Centre, Prahran)
2. Russian (Russian Welfare, Dandenong)
3. Hungarian (South Central Region Migrant Resource Centre, Prahran)
4. Spanish (Prodel, Springvale)
5. Turkish (South Eastern Region Migrant Resource Centre, Dandenong; Springvale Community Aid and Advice Bureau, Springvale)
6. Italian (CO.AS. IT)

Gambler’s Help Southern bilingual workers additionally identified service providers representing their languages, including:

- Arabic (South Eastern Region Migrant Resource Centre, Dandenong)
- Vietnamese (Acacia Indo-Chinese Centre, Richmond)
- Chinese (Chinese Community Social Services, Burwood)
- Croatian (Australian-Croatian Community Welfare, Springvale)
- Polish (South Eastern Region Migrant Resource Centre, Dandenong)

The team members contacted service providers to explain the purpose of the manual and consultation process, and to arrange meetings. The English version of the manual and a letter of explanation (see Appendix 1) were sent to the workers two weeks prior to consultation, so they were able to comment after consideration.
Consultation and Translation Process

During the consultation, team members discussed the content of the manual with service providers, addressing issues such as practicality, cultural and linguistic relevance and appropriateness (see Appendix 2). Throughout this process, all comments were recorded to assist the team in developing a culturally relevant manual for each community group.

A number of valuable comments were gathered. Some of them related to rephrasing and defining parts of the text, as well as altering the names in the case studies to make them more appropriate to the various cultural backgrounds.

The team consolidated feedback from all consultations and finalised a unified English version of the manual. It was then translated into all selected languages. The same service providers were contacted for a second consultation. The workers discussed the translated copies, concentrating on similar issues to the first consultation. Comments were then submitted to the translators to finalise the text for the manual.

Taking into account the sensitivity and complexity of gambling issues, most of the suggestions related to the usage of more friendly and simple language. In this process, it became evident that during the translation the content of the handbook was interpreted according to words and often not to the context and the spirit of the manual. For instance, in some languages, even the title of the handbook had to be altered because of different or not friendly meaning of its direct translation.

The consultation process proved to be a highly valuable tool in developing simple, friendly, culturally and linguistically appropriate material. The process of producing one unified version of the handbook that suits people from all selected backgrounds was difficult and required a substantial amount of discussion, elaboration, negotiation and most of all compromise.

Printing

The translated manuals were sent to a specialised printing company. Two thousand copies of the manual were printed in most target languages. Budget constraints prevented the printing of the Arabic, Polish and Vietnamese versions. However, these have been photocopied for distribution.

Multicultural Poster

The Gambler’s Help Southern Multicultural Services Team also developed a poster to promote the availability of the manual. Information on the poster includes a message in all respective languages, and relevant contact numbers for people affected by gambling from culturally and linguistically diverse backgrounds.

Development Issues

In the process of producing the multicultural self help manual, the team encountered a number of difficulties. The main areas of concern were the translation and printing processes.

Translation Difficulties

Translation of documents is always a difficult process. Each translator has various methods of both reading and explaining concepts. Obstacles encountered in the translation process were:
• Inability to proof read languages that were not present within the team. The team had to rely on the goodwill of community workers to assist in clarifying that the translations were correct and also that they were culturally appropriate
• During the translation process, it became evident that many of the translations were very literal and failed to grasp the context or spirit of the manual

Consultation greatly assisted in this process, as community workers were able to distinguish relevant areas for improvement.

**Printing Difficulties**

Printing the self-help manual required understanding of the printing process and also any ancillary needs, such as particular formats, style and layout possibilities, and operating approaches. There was a sharp learning curve regarding the production requirements of the document. Typesetting for each language had to be completed by the translators in the relevant program and language. This was arduous, as some languages had to be produced in separate programs due to their font and character differences. These were then assessed by the printer and alterations made due to problematic typesetting. Since many of the languages were unfamiliar, the team had to rely on the translators to accurately complete the typesetting. This did not occur and an additional print run of one specific page needed to be completed after the printer discovered an error.

In addition, coordination of tasks became increasingly difficult. All team members had specific tasks and these were not easy to achieve within the time constraints.

**Training Community Service Providers**

Following completion of the multicultural self help manual, team members conducted thirteen training sessions introducing the self-help manual to thirty-four multicultural service providers from agencies across the region.

The aim of the training was to familiarise service providers with the content of the self-help manual so they could provide it to community members in an informed manner and also directly use the material to assist clients.

**Methodology**

• The Gambler’s Help Southern Multicultural Team contacted multicultural service providers and arranged times for information sessions
• Sessions were conducted to introduce and train multicultural service providers in the use of ‘Strategies for Change’
• Copies of the English version of the manual were given to the trainees
• During the training, guidelines were provided and the following topics were discussed:

1. The aim of developing the self help manual
2. A brief outline of the production process
3. Content of the self-help manual
4. The process of gambling, money management and strategies for non-gambling family members
5. Opportunities to book a more comprehensive training session in using the manual
6. Content and best method of distribution for the manual
7. Referral procedures and professional support

Distribution

Since the development of the self-help handbook, they have been continuously distributed to a range of services across the region including community agencies, migrant resource centres, ethno-specific agencies, neighbourhood houses, community centres, doctors’ surgeries and others. They have proven to be an excellent resource to use as an adjunct to information sessions with various communities and as an additional tool in counselling sessions.

Outcomes and Conclusion

‘Strategies for Change’ was developed to assist workers and clients from culturally and linguistically diverse backgrounds to deal with problem gambling issues. With this in mind, it is always difficult to produce a unified version of the manual that suits all cultural groups. Substantial discussion, elaboration, negotiation, compromises and consultation were needed to complete a workable manual. The current format will be reviewed, enhanced and further developed. Future expansion of the number of languages covered, supplementary activities for self-awareness and additional training to other community workers will be undertaken.
Appendix 1. (Example letter to service providers)

Dear……………………………………

Following our discussion on the telephone, I am writing to thank you for accepting our invitation to participate in the consultation process for producing the multicultural self help manual for people affecting by problem gambling.

The Gambler’s Help Southern Multicultural Services Team is developing a self-help manual, which will be translated into community languages within the southern region. It is essential to consult bilingual community workers like yourself to help us produce a culturally and linguistically appropriate manual.

The consultation process will include the following stages:

♦ You will receive the English version of the manual to read.
♦ We will meet and discuss the content of the manual (eg its relevance, cultural appropriateness etc)
♦ You will receive a revised English version and the translated copy of the manual in your language.
♦ We will meet again to discuss the translated manual.

We thank you and appreciate your participation in this process. Your input will be valuable to the community.

I am looking forward to meeting you soon at our first consultation. Meanwhile, please contact me on ……………should you have any queries in regard to this letter.

Yours sincerely,

Multicultural Service
Gambler’s Help Southern
Appendix 2. Consultation Questionnaire

Date:

Language:

Content:

- Is the manual easy to understand?
- Is there anything that needs to be rephrased, explained or defined better?
- Are there any other comments or suggestions?

Presentation / Format

- Do you like the presentation of the manual?

Distribution and Training

- How will you use the manual?
- How would you distribute the manual / ideas about the distribution process?
- Do you need / want training about the manual?
- Do you think it would be valuable to train other community workers?
- Any other ideas or suggestions?
Economic socialisation and youth gambling in Australia

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Abstract
Recent Australian studies (e.g., Moore & Ohtsuka, 1997) have revealed a strong youth interest in gambling in Australia, as reflected in current participation levels, future intentions and attitudes. Implicit in much of this attitudinal research is that youth gambling is strongly influenced by the familial, social and cultural norms to which young people are exposed. In this paper, we investigate the hypothesis that gambling can be understood in terms of variations in economic socialisation, namely, the way in which children learn about money, risk, and saving. A school survey of 505 adolescents (aged 15-17 years) showed that over 60% of adolescents were gambling annually and that 3.5% scored in the problematic range on the DSM-J (Fisher, 1999). More frequent gambling was associated with parental and peer gambling and pro-gambling attitudes, but unrelated to adolescents’ attitudes towards economic concepts. Nevertheless, in partial support of the hypotheses, adolescents whose parents taught them about keeping to a budget, saving money, and maintaining their finances were less likely to express an interest in future gambling.

Introduction
Although research into the nature and overall prevalence of adult gambling in Australia is well established, there has, somewhat surprisingly, been only moderate interest in the gambling behaviour of younger people. This may be because Australia, unlike other countries such as the United Kingdom and Canada, has much stricter laws limiting the accessibility of gambling to minors. For example, whereas the United Kingdom provides opportunities for minors to gamble on slot-machines in amusement arcades, most common forms of gambling in Australia are only available in licensed venues such as clubs, hotels and casinos, all of which are restricted to adults aged 18 years or older. Thus, with few (if any) minors visible in gambling venues, not to mention the absence of young people approaching treatment centres for assistance, it has been commonly assumed that gambling is not a significant feature of the lives of young people in Australia.
In the last five years, this assumption has become increasingly called into question by both policy-makers and researchers who have drawn attention to a variety of reasons why the issue of youth gambling is worthy of attention in Australia. First, in almost all surveys of Australian gambling, it has been found that the prevalence of gambling-related problems tends to be significantly higher in younger adults (aged 18-30 years) than in all other age cohorts (Delfabbro & Winefield, 1996; Dickerson, Allcock, Blaszczynski, Nicholls, Williams, & Maddern, 1996; Productivity Commission 1999; South Australian Department of Human Services). This suggests very strongly that gambling habits observed during early adulthood are likely to have developed at an earlier age. In support of this view, a number of studies (e.g., Blaszczynski, Walker, Sagris, & Dickerson, 1997; Custer, 1982; Lesieur & Klein, 1987) found that problem gamblers frequently report having developed problematic behaviours as early as 10 years of age. More importantly, in studies which have administered measures of problem gambling to adolescents, it has been found that adolescents experience gambling-related problems at 2-3 times the rate of adults. This has been confirmed in the United Kingdom (Fisher, 1999; Wood & Griffiths, 1998), the United States (Winters, Stinchfield, & Kim, 1995), in Canada (Gupta & Derevensky, 2000) and in New Zealand (Sullivan, 2001). A comprehensive review by Jacobs (1999) point out that, whereas adult prevalence rates were typically in the order of 1-2%, the mean rates emerging in a decade of North American studies was around 6% for Canada and 4% in the United States.

The second concern relates to the assumption that young Australians are necessarily denied access to all forms of gambling. In a number of Australian States, adolescents can legally purchase lottery tickets and scratch-cards at the age of 16. This latter form of gambling has been consistently shown to be associated with gambling-related problems in the United Kingdom (Fisher, 1999; Wood & Griffiths, 2001). The small entry price, the capacity to make repeated purchases in a short-interval of time, combined with enticing features such as ‘near-miss’ combinations (Griffiths, 1993, 1995) means that this form of gambling shares much in common with slot-machine gambling.

A further concern is that, while adolescents may not themselves be able to enter gambling venues, they can nonetheless gamble by asking older siblings and friends to place bets (e.g., on sporting events or races) on their behalf. Alternatively, even when one considers activities traditionally undertaken at venues, there is little to prevent teenagers from gambling on traditional casino games such as blackjack and poker privately amongst their peers, or via the Internet or a telephone account established using a credit card. A further possibility is for teenagers to gamble on activities in venues, which they are legally entitled to enter, such as billiards and pool in amusement halls that are common congregation points for teenagers in most Australian cities. In these venues, clandestine betting could easily be conducted without arousing the attention of staff. Given that all of these forms of adolescent gambling have been documented in numerous international studies (e.g., Derevensky, Gupta, & Della Cioppa, 1996; Fisher, 1999; Ladouceur & Mireault, 1988; Ladouceur, Dube, & Bujold, 1994; Lesieur & Klein, 1987), it is reasonable to expect that similar patterns could also be observed in Australia.

The third area of concern identified by international studies is the apparent association between adolescent gambling and other risk-taking activities, not to mention broader problems in psychosocial development, and educational performance (Fisher, 1999). Studies in both the United Kingdom (e.g., Fisher, 1992, 1993; Yeoman & Griffiths, 1996) and in Canada (Gupta & Derevensky, 1998) have found that adolescent problem gamblers have a significantly higher incidence of delinquent behaviours, including substance abuse, truancy, and petty criminal behaviour. Problem gamblers also tend to have poorer educational outcomes, poorer self-esteem and greater levels of anxiety and depression compared to non-gambling peers. As Fisher (1999) points out, although it is not possible to determine whether these problems are a cause or
consequence of problem gambling, this clustering of problem behaviours suggests that screening for problem gambling should be an important component in the psychological assessment of young people who are experiencing broader psychosocial problems.

The small, but steadily growing numbers of Australian studies that have examined these issues have produced generally similar results, although the prevalence of both regular gambling and problem gambling is lower than in the United Kingdom. Moore and Ohtsuka (1997), for example, surveyed over 1000 school and university students (aged 14-25 years) years and found that the majority approved of gambling activities, and had gambled in the previous 12 months. The most popular activities were lotteries, card games and poker machines. Using a modified 10-item version of the South Oaks Gambling Screen (SOGS) (Lesieur & Blume, 1987), they found that 3.1% of the sample could be classified problem gamblers. In addition, consistent with the predictions of Ajzen and Fishbein’s (1980) Theory of Reasoned Action, Moore and Ohtsuka (1997) found that regular gambling was significantly associated with people who held positive and optimistic attitudes towards gambling, and whose parents and peers shared similar views. A follow-up study involving 769 adolescents aged 15-18 years confirmed these results, with 3.8% of the sample found to score in the problematic range on the SOGS (Moore & Ohtsuka, 2001).

Other studies have focused specifically upon teenagers and extended the investigation to consider the relationship between gambling involvement and psychosocial adjustment. Burnett, Ong and Fuller (1997), for example, surveyed 778 final year high-school students (age 16-18 years), and found that weekly gambling was associated with dissatisfaction with school (males), social maladjustment, having friends who gambled, and involvement with other at-risk behaviours, including under-aged drinking and risky driving. Similar results were obtained by Jackson (1999) in a study of 2700 first year high-school students (Year 8) who found that students who were more involved in gambling (as measured by the number of activities preferred) were more likely to engage in risky-behaviours (alcohol, smoking, drug-use), to be less engaged with school, and more likely to commit self-harm.

These studies provide many useful insights into young gambling in Australia. However, it is unclear, given the age-range of samples selected, whether the studies can be classified as true studies of under-aged adolescent gambling. Both Moore and Ohtsuka studies included adults (18+ year olds) in their sample and only present a brief summary of significant age differences; Jackson et al. (1999) studied very young adolescents many of whom might not as yet had the opportunity to gamble, whereas Burnett et al. (1999) only studied Year 12s, a method which might have under-sampled adolescents less well disposed towards school and who might have already left at the age of 15 (Year 10). Furthermore, although Moore and Ohtsuka (1998, 1999) included a measure of problem gambling, namely, a modified version of the SOGS, this work could be further validated using measures which have been utilised in overseas studies, for example, the adolescent version of the DSM-J (Fisher, 1999) or SOGS-RA (see Gupta & Derevensky, 2000 for a review).

Also implicit in this research is an assumption that adolescent gambling is strongly influenced by developmental factors and socialisation. Adolescents who gamble also tend to have parents who gamble, and also appear to perceive gambling in much the same way as many adult gamblers. Moore and Ohtsuka (1998), for example, found that adolescents who gamble tend to be overly optimistic about their chances of winning, and to over-estimate the economic benefits arising from gambling. From a social learning perspective (Bandura, 1986), it is possible that such beliefs

15 Note: Ong et al.’s study sampling was appropriate for the purposes of their study, namely, to obtain a baseline for people about to leave school.
are socially transmitted, such that children’s beliefs about activities such as gambling are shaped by the information, advice and behaviour of parents. This view is endorsed by Furnham (1986) who argues that gambling is a form of economic behaviour, and that children come to understand gambling in much the same way that they come to understand concepts such as saving, investing and spending. Parents who emphasise saving, budgeting and other money management strategies, and who provide a stable allowance to their children, are thought to encourage greater caution in the use of money, including a reduced desire for risk-taking and a greater appreciation of the benefits of delaying expenditures and seeking instant gratification. In this is so, it could be hypothesised that gambling would be perceived as a less desirable choice of activity, and a waste of money rather than a way of earning it in such households. In contrast, in households where such strategies are not emphasised, children might be less likely to assume responsible attitudes towards money. Within these households, it might be hypothesised that gambling would be considered a more attractive activity because of its potential to deliver large returns in the short-term.

These issues were examined in a study involving over 500 adolescents (< 18 years) in South Australia. The aim of this research was threefold. The first aim was to assess the nature and prevalence of under-aged gambling and gambling-related problems in an Australian sample; the second was to replicate some of Moore and Ohtsuka’s (1997) key findings concerning the influence on parent and peer attitudes upon gambling behaviour in a fully underage sample; and thirdly, to investigate Furnham’s (1986) hypothesis that gambling might be related to broader socialisation processes involving the provision of parental advice and instruction about economic concepts and money management.

Method

Participants

The total sample consisted of 505 (males=226, females=270, 9 gender missing) students in years 10, 11 and 12 from six metropolitan high schools. There were 135 (27%) from year 10, 214 (42%) from year 11, and 151 (30%) from Year 12 or 13. The mean age of the sample was 16.5 years (SD= 0.77) with a range of 14 to 17 years of age. Most students lived with their mother and father (70.7%), while some lived with only their mother (11%) or with their mother and step-father (10%). The remainder (8.2%) resided either with their father only, step-mother and father, foster parents, relatives, or other family situation.

Measures

1. Gambling habits

Participants were asked how often during the previous 12 months they had gambled on all the major forms of gambling available in South Australia, including: cards, slot-machines, racing, sports, lotteries, bingo and scratch cards, and on the Internet. All responses were recorded on 5 point scales, where 1=Never, 2=1-2 times per year, 3=3 times a year up to monthly, 4=2-3 times per month, and 5=weekly or more often.

2. Future gambling intentions*

Adolescents were asked to indicate which of the activities listed in (1) they would like to try in the future when they turned 18. They were also asked to rate their future interest in gambling using 3 questions each scored using 5-point Likert scales (1=strongly-disagree to 5=Strongly
agree): ‘I can’t wait to turn 18 so I can go to adult gambling venues.’, ‘When I turn 18, I will gamble a lot more than I do now’, and ‘In the future, I will definitely like to gamble regularly.’

* This measure was included after the data-collection was underway. Hence, the reduced sample size for analyses involving these questions.

3. Peer and family approval of gambling

On 5-point Likert scales (1=strongly disagree to 5=strongly agree) adolescents were asked to describe the gambling attitudes and behaviours of their friends and family. Four questions were asked based upon varying the words friends and family ‘Most of my friends/ family approve of gambling’, and ‘Most of my friends/family gamble a lot’. These items were adapted from scales developed by Moore and Ohtsuka (1997).

4. Attitudes towards gambling

Participants were also administered 12 statements to which they had to rate their agreement on a 5–point Likert scale (1=strongly disagree to 5=Strongly agree) their attitudes towards gambling as an economic activity. Principal components analysis of these items was undertaken because all items were designed to measure a single underlying factor or construct. Oblique rotation was used because potential components were expected to be correlated. This analysis showed that items could be classified into 3 meaningful factors all with Eigenvalues > 1 and which explained 60% of the variance. The first factor (‘Unprofitability’) comprised 5 items with an alpha reliability of 0.78. These items included: ‘Gambling is a risky activity’, ‘You can lose all your money gambling’, ‘Gambling is a waste of money’, ‘Gamblers usually lose’, and ‘To gamble is to throw away money’. The second factor (‘Profitability’) attracted high loadings from 4 items and had an alpha reliability value of 0.79; these items included: ‘You can make a living from gambling’, ‘Gambling is a good way to get rich quickly’, ‘Gambling is a better way to make money than working’, ‘Gambling is designed to give high returns’. A third factor was revealed in the factor analysis but these were not strongly correlated (0.27) and too few to be combined into a scale.

5. Problem gambling measure

As there are no validated Australian measures of adolescent problem gambling, the adolescent version of the DSM-IV, the DSM-IV-J (Fisher, 1999) was used. This consists of 9 questions. Including such behaviours as: being occupied with gambling, been restless and irritable if unable to gamble, chasing behaviour, spending lunch money, stealing money, and social conflict (see Fisher, 1999 for full wording and details). Each of the items was scored Yes/No, with scores being based upon the total number of Yes responses. Although Fisher (1999) has also developed a multiple-response version of the DSM-J, there is little evidence that scores on this scale differ in any way from the regular Yes/No version. As with the adult scale, scores of 4 or more on the DSM-J are indicative of problem gambling. The internal reliability of this scale was found to be acceptable in this sample, $\alpha=0.75$.

6. Money management and economic socialisation

Adolescents were also asked to rate the importance of 7 money management issues on a 4-point scale, where 1=Very important, 2=Important, 3=Somewhat important, 4=Not important at all. The issues included: Keeping to a budget, Saving money, Spending their money wisely, Not
spending money all at once, Saving up for something important, Maintaining a bank account, and learning about investments. They were also asked to rate how often their parents talked to them about each of the issues: 1=Never, 2=Rarely, 3=Sometimes, 4=Often, 5=Very often.

7. Initial gambling experiences

Adolescents were asked whether they had obtained a large win in their first few attempts at gambling, and if so, how much they had won. This question was included because of previous research suggesting that early wins play a significant role in future gambling.

Procedure

The methodology was very similar to that employed by Moore and Ohtsuka (1997), except that the recruitment of schools did not focus upon a specific socio-economic area. Instead, an attempt was made to select high schools from each major region of the Adelaide metropolitan area: south, north and central region. Six secondary/high-schools schools agreed to participate: one large school in the southern region, 3 in the north, and 2 in the central part of Adelaide. The two centrally locally schools are generally regarded as attracting students from higher socio-economic areas, whereas the remaining 5 schools tend to attract students from lower socio-economic areas. The co-investigator visited the schools and announced the study and called for volunteers during school assemblies, and teachers distributed surveys and parental and student consent forms to volunteering students in class. As in the Moore and Ohtsuka study, the aim was to get approximately, 30-40 students (the equivalent of a full class from each of the 3 year levels (10, 11 and 12).

-Students were promised a movie voucher for satisfactorily completed surveys. The co-investigator returned 3-4 days later to collect consent forms (and completed surveys on some occasions) or to supervise the completion of surveys in class. Identification numbers of consent forms allowed the distribution of movie-passes to the correct recipients once the survey number had been cross-validated. Of those who returned consent forms and volunteered, 90% returned the surveys appropriately completed.

Results

Gambling frequency

Gamblers were classified into three groups: never (not gambled within the last 12 months), infrequent (gambled 1-2 times per year to 2-3 times per month) and frequent based upon weekly or more often gambling on at least one activity. Based upon this classification, 37.5 % (n=188) of adolescents could be classified as non-gamblers, 47.8% (n=240) gambled infrequently, and 14.7% (n=74) gambled on a weekly basis or more often. Further analysis examined the frequency of participation across all the most common forms of gambling. As indicated by Table 2, lotteries, scratch-tickets and sports betting were the most popular forms of gambling with between 5-7% of participants having a weekly involvement in these forms of gambling.

Table 1. Number (%) of adolescents gambling on each activity at each frequency
<table>
<thead>
<tr>
<th>Gambling Activity</th>
<th>Adolescent past 12 months gambling behaviour n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Card games (Blackjack, poker)</td>
<td>397 (79.9)</td>
</tr>
<tr>
<td>Poker-machines</td>
<td>431 (86.9)</td>
</tr>
<tr>
<td>Racing (horses, dogs, trots)</td>
<td>424 (85.5)</td>
</tr>
<tr>
<td>Sporting events</td>
<td>392 (79.4)</td>
</tr>
<tr>
<td>Lottery games (Keno, Crosslotto, Powerball, Pools)</td>
<td>317 (63.5)</td>
</tr>
<tr>
<td>Bingo or Scratchies</td>
<td>284 (57.7)</td>
</tr>
<tr>
<td>Internet gambling</td>
<td>486 (97.6)</td>
</tr>
</tbody>
</table>

There were few gender differences in gambling frequency when this was analysed in terms of those who gambled vs. those who did not gamble. Males were no more likely to be gamblers or non-gamblers than females, $\chi^2$, (1, N= 493) < 1. The only exceptions were for playing cards and scratchies or bingo. Males were significantly more likely to be gamblers on cards (56.6%) than females (43.4%), $\chi^2$ (1, N=488)=6.38, p<.01. Females were more likely to gamble on scratchies or bingo (59.5%) than males (40.5%), $\chi^2$(1) = 3.98, p<.05.

**Future gambling behaviour**

Adolescents reported that they would most like to try lottery games, poker machines and scratchies or bingo when they turned 18 years of age (Table 2). Preferences differed according to gender several gambling activities, including: cards, poker machines, racing betting, sports betting and Internet gambling. Males were more likely to express an intention to gamble on cards (46.3% vs. 34.8%; $\chi^2$(1)=3.76, p<.05), racing activities (41.3% vs. 27.8%; $\chi^2$(1)= 5.57, p<.05), sports betting (45.5% vs. 22.2%; $\chi^2$(1)=17.03, p<.001), and Internet gambling (19.8% vs. 11.4%; $\chi^2$(1)=3.82, p<.05). Females were more likely than males to express an intention to play poker machines (53.7% vs. 67.1%; $\chi^2$(1)=5.16, p<.05).

Table 2. Gambling activities adolescents would like to try when 18 years of age
Table 2 shows that many adolescents intended to gamble or attend gambling venues when reach the legal age of 18 years. This was confirmed by general attitudinal items (Table 3). As indicated, 5% of respondents expressed a strong desire to gamble when they turned 18, 15% indicated that they wanted to gamble more than they were now, although fewer than 1 in 5 indicated a strong desire to gamble regularly. In South Australia, less than 10% of the population gambles regularly at gambling venues (Delfabbro & Winefield, 1996).

<table>
<thead>
<tr>
<th>Gambling activity</th>
<th>Yes %</th>
<th>No %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Card games (Blackjack, poker)</td>
<td>39.6</td>
<td>60.4</td>
</tr>
<tr>
<td>Poker-machines</td>
<td>61.1</td>
<td>38.9</td>
</tr>
<tr>
<td>Racing (horses, dogs, trots)</td>
<td>33.6</td>
<td>66.4</td>
</tr>
<tr>
<td>Sporting events</td>
<td>32.1</td>
<td>67.9</td>
</tr>
<tr>
<td>Lottery games (Keno, Crosslotto, Powerball, Pools)</td>
<td>67.5</td>
<td>32.5</td>
</tr>
<tr>
<td>Bingo or Scratchies</td>
<td>60.4</td>
<td>39.6</td>
</tr>
<tr>
<td>Internet gambling</td>
<td>15.0</td>
<td>85.0</td>
</tr>
</tbody>
</table>

Males and females also differed in their attitudes to future gambling habits. Males were more likely to agree that they could not wait to turn 18 to go to gambling venues (M=2.53, SD=1.21 vs. M=2.26, SD=1.08), t(299)=2.10, p < .05, that they would gamble more when they turn eighteen years of age (M=2.48, SD=1.25 vs. M=2.01, SD=1.07), t(298)=3.41, p < .001, and that they would definitely like gamble more in the future (M=2.19, SD=1.04 vs. M=1.83, SD=0.91), t(296)=3.17, p < .01.
There was also a significant association between the intention to gamble more when 18 years of age and gambling frequency. Weekly gamblers were more likely to agree that they could not wait to go to adult gambling venues, $F(2,299)=12.47, p<.001$, that they would gamble more when they turned 18, $F(2,298)=11.00, p<.001$, and that they would definitely like to gamble more in the future, $F(2,296)=14.40, p<.001$, than infrequent gamblers, and infrequent gamblers more than non-gamblers (Fisher Exact tests, $p<.05$).

Gambling frequency also varied significantly across the 3 year levels (Table 4). Year 12 students were significantly less likely to gamble regularly (7%) than Year 10s (20%) and Year 11s (16%), $\chi^2(4)=14.29, p<.01$.

Table 4. Frequency of gambling by Year Level

<table>
<thead>
<tr>
<th>Year Level</th>
<th>Never n (%)</th>
<th>Infrequent n (%)</th>
<th>Frequent n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 10 (n=133)</td>
<td>42 (31.6)</td>
<td>64 (48.1)</td>
<td>27 (20.3)</td>
</tr>
<tr>
<td>Year 11 (n=214)</td>
<td>88 (41.1)</td>
<td>91 (42.5)</td>
<td>35 (16.4)</td>
</tr>
<tr>
<td>Year 12 (n=154)</td>
<td>58 (37.8)</td>
<td>85 (55.2)</td>
<td>11 (7.1)</td>
</tr>
</tbody>
</table>

Adolescent views of gambling

One way analysis of variance (ANOVA) revealed a significant group difference for the unprofitability subscale, $F(2, 491)=8.04, p<.001$. Fisher post-hoc tests applied to these results showed that adolescents who never gambled rated gambling as significantly more unprofitable (M=18.87, SD=4.47) than those who gambled infrequently (M=17.61, SD=4.09) or frequently (M=16.66, SD=4.91), $p<.05$. There was, however, no difference in unprofitability subscale scores between the two groups of gamblers. There was also a group difference for the profitability subscale, $F(2,489)=3.86, p<.05$. Fisher tests showed that this was the result of the weekly gamblers rating gambling as significantly more profitable (M=8.37, SD=4.12) than did the infrequent (M=7.24, SD=3.22) and non-gamblers (M=7.13, SD=3.22).

Family and friends’ attitudes towards gambling

Adolescents who gambled more were more likely to report that their family and friends were more approving of gambling, $F(2, 450)=19.53, p<.001$, $F(2,406)=9.82, p<.001$, respectively. Furthermore, those that held the belief that family and friends gambled a lot were more likely to be more frequent gamblers, $F(2,272)=9.53, p<.001$; $F(2,253)=9.68, p<.001$, respectively. Fisher post-hoc tests showed that non-gamblers were less likely than gamblers to have friends who approved of gambling. Regular gamblers were more likely to have families who approved of gambling than the two other groups, and irregular gamblers were more likely to have approving families than non-gamblers. Non-gamblers were significantly less likely than the other groups to have friends and families who gambled a lot, $p<.05$ (Table 5).

Table 5. Mean (s.d.) ratings on attitude statements
Expenditure and early wins

The mean amount won gambling when they first gambled was $37.50 and the mean amount lost was $9.21. Furthermore, 20.6% of adolescent reported that they had a big win in one of first few attempt at gambling. On average these big wins were approximately $100 and ranged up to a maximum of $760. Big wins in the first few attempts of gambling were significantly associated with the frequency of gambling by adolescents, $\chi^2(2)=28.04$, $p<.001$. Of those who had never gambled in previous 12 months, only 7% reported a big win compared with 24% for the infrequent gamblers, and 45% for the regular gamblers. Big wins, however, were associated with the intention of future gambling when the participant turned 18 years of age. Adolescents who had experienced a big win in the first few times they gambled were more likely than those that had not experienced a big win, to agree with the statements that they could not wait to turn eighteen years of age so that they could go to adult gambling events ($M=2.90, SD=1.28$ vs. $M=2.24, SD=1.07$), $t(200)=2.48$, $p<.05$, that they would gamble more than they do now when they turned eighteen years of age ($M=2.74, SD=1.38$ vs. $M=2.08, SD=1.08$), $t(199)=2.49$, $p<.05$, and that in the future they would definitely gamble regularly ($M=2.34, SD=1.18$ vs. $M=1.89, SD=0.90$), $t(198)=5.88$, $p<.05$.

A further analysis examined whether big wins influenced the intention to gamble on each type of gambling in the future. There were no differences except for Internet gambling, with adolescents who experienced a big win indicating that they would be more likely to try internet gambling in the future, $\chi^2(1, N=187)=6.55$, $p<.01$.

Attitudes towards money management

When asked whether their parents had instructed them on these issues at least sometimes, it was found that 63% had been instructed about keeping to a budget, 81% had been told to save, 80% were told to spend their money wisely, 71% were told not to spend their money all at once, 69% were told to maintain a bank account, and only 42% had been told about investing money. Thus, approximately 20% of children received very little advice on the importance of financial prepared for the future.

One way analyses (ANOVA) comparing scores on these items across the three gambler groups showed that weekly gamblers were no more likely to rate money management as less important than non gamblers and infrequent gamblers for most items of the money management scale. Furthermore, scores on items relating to whether the participant was taught about money management by their parents also did not vary significantly across the groups.
Problem gambling

Most adolescents did not experience problems concerning gambling behaviour. Problem gambling was classified as a score of 4 or higher on the DSM-J. Based upon this classification, 3.5% of the participants could be categorised as problem gamblers. Approximately 9.0% report one difficulty with gambling, 4.3% reported two difficulties and 1.9% reported three difficulties. This gave a total of 18.8% scoring at least 1 on the DSM-J-R. As might be expected, scores on the DSM-J-R differed significantly across the 3 gambling groups, with more frequent gamblers found to have higher scores, $F(1,459)=21.18, p<.001$. The level of problem gambling did not vary according to school year level.

Of the total sample, 38 (7.5%) were preoccupied with gambling, 26 (5.1%) gambled to increase the excitement, 20 (4.0%) got irritable when they tried to cut down gambling, 18 (3.6%) used gambling to escape anxiety and depression, 34 (6.7%) chased their losses, 54 (10.7%) often spent more than they intended, 25 (5%) spent their lunch money or stole money to gamble, 14 (2.8%) had fallen out with friends, or disrupted their studies because of gambling.

Since only very few adolescents could be classified as problem gamblers, further analyses were conducted comparing those who scored 0 vs. those who scored 1 or more on the DSM. For the purposes of this analysis, this second group could be considered ‘at risk’ of gambling problems. A total of 89 (18.8%) adolescents could be classified at risk. Of these, 27 gambled regularly and 62 gambled infrequently.

Scores on the various attitudinal items were compared across these 2 groups. The results showed that the at risk group was significantly more likely to have friends who approved of gambling, $t(424)=2.52, p<.05$, who gambled a lot, $t(274)=2.30, p<.05$, and whose family gambled a lot, $t(274)=2.25, p<.05$. The at risk group was more likely to believe that one could make money by gambling ($M=3.83, SD=1.09$ vs. $M=3.40, SD=1.12$), $t(449)=3.20, p<.001$. The ‘at risk’ group was significantly less likely to believe that gambling involved throwing away money ($M=3.31, SD=1.17$ vs. $M=3.72, SD=1.13$), $t(451)=3.00, p<.01$.

Finally, problem gambling scores were significantly related to whether the person had obtained a large win in the first few attempts at gambling, Fisher’s Exact, $p<.05$.

Relationships between attitudinal beliefs

The approval of gambling by family and friends was associated with the likelihood of future gambling. Adolescents who reported that their friends disapproved of gambling were more likely to disagree with the statement that they ‘couldn’t wait to turn eighteen years of age to go to adult gambling venues’ (97.3%), that when they turn 18 years of age they would gamble a lot more than they do now (95.5%), and that in the future they would definitely like to gamble regularly (100.0%). Adolescents who reported that their family disapproved of gambling were also more likely to disagree with the statement that they could not wait to turn eighteen years of age to go to adult gambling venues (92.4%), that when they turn 18 years of age they would gamble a lot more than they did now (91.0%), and that in the future they would definitely like to gamble regularly (97.1%).

Future gambling was also found to be associated with adolescent attitudes towards gambling. Adolescents who agree and strongly agreed with the statement that they could not wait to turn 18 years of age so they could go to adult gambling venues, were more likely to agree that one could
make money out of gambling (93.5%). For adolescents who disagreed and strongly disagreed
with the statement that they could not wait to turn 18 years of age so they can go to adult
gambling venues were more likely to agree that gambling is waste of money (89.5%), that
gamblers usually lose (85.5%), to gamble is to throw away money (87.6%) and gambling is not a
profitable activity (76.3%), and disagree that you can make a living out of gambling.
Adolescents who agreed or strongly agreed with the statement that 'when I turn eighteen, I will
gamble a lot more than I do now', were more likely to agree or strongly agree with such
statements 'you can make money from gambling (93.5%). Those that disagreed with this
statement were more likely to agree that gambling is a waste of money (90.8%), that gamblers
usually lose (88.0%), to gamble is to throw away money (87.4%) and gambling is not a
profitable activity (76.9%), and disagree that you can make a living from gambling (89.5%). Finally,
adolescents that disagreed with the statement relating to their own future gambling, were more
likely to agree that gambling is a risky activity (89.7%), that gambling is a waste of money
(90.8%), that gamblers usually lose (85.1%). Conversely, adolescents who agreed that they
would like to gamble regularly in the future agreed or strongly agreed that gambling can supplement
your wage (72.7%) and that you can make money from gambling (100.0%).

Adolescents were more likely to disagree with the view that they would gamble in the future if
parents taught money management strategies. Adolescents who reported that they their parents
either sometimes, often or very often taught them about keeping to a budget (65.0%), saving
money (83.4%), spending you money wisely (80.0%), saving up for something important (79.7%)
and maintaining a bank account (68.7%) were less likely to agree that in the future they would
definitely like to gamble regularly, all \( \chi^2(1), p < .05 \).

Discussion

Although it is difficult to draw exact comparisons with previous studies of gambling in Australia
because of dissimilarities in the age-range of the participants and also the measures, the results in
this study are nonetheless quite similar. This study confirmed that adolescents in Australia
generally have much lower level of gambling participation than those in countries such as the
United Kingdom (e.g., Fisher, 1999), Canada and the United States. In this study, only 63%
reported having gambled in the previous 12 months, whereas studies overseas have commonly
reported figures over up to 80% (Fisher, 1999), with higher levels of regular participation on
continuous forms of gambling such as slot machines. For example, in the Fisher study, 19% of
youth had gambled in the previous week on slot machines, whereas fewer than 1% had done so in
the present sample. A further example is weekly lottery usage, which was estimated at 10% in the
Fisher study compared with only 5% in the present sample.

Similarly, while the estimated prevalence of problem gambling in this sample (3.5%) is
comparable to that obtained by Moore and Ohtsuka (1997), namely 3.1%, these figures are also
considerably lower than figures obtained in New Zealand (Sullivan, 2001), and, with a few
exceptions, the figures obtained in the United States and Canada during the last decade (Jacobs,
1999). One exception, for example, is the recent Montreal study conducted by Gupta and
Derevensky (2000) who obtained a very similar prevalence figure using the DSM-J (3.4%).
However, this measure is thought to be more conservative than other more commonly used
measures such as the SOGS-RA, which yielded a figure of 5.3% in the Gupta and Derevensky
study. Even despite these differences, a common feature of all studies in including the present one
is that adolescent gambling prevalence figures are much higher than the corresponding adult
figures, which typically range between 1-3% (Productivity Commission, 1999). Not surprisingly,
this finding has given rise to considerable controversy amongst researchers, who have questioned
the validity of the figures given that so few adolescents are seeking assistance for gambling-related problems.

According to Griffiths (1998), this inconsistency might be due to several particular features of adolescent gambling that distinguish it from adult gambling. First, since many adolescents are living at home, they often do not have a job or anyone dependent upon their income, and so gambling difficulties are less likely to affect others. Second, adolescents might often be bailed out of trouble if they spend more than they can afford. Third, it may that the absence of specific treatment services for young people makes means that they do not seek formal help, and instead search for informal sources of assistance such as friends and family. A fourth possibility is that most adolescents with gambling problems ‘mature out’ of the problem, possibly as a result of establishing relationships and securing employment.

On the other hand, a second view is that the measures of problem gambling are suspect and that very high prevalence figures should not be taken seriously. Although teenagers experience similar problems as adults as based upon self-report, the nature or magnitude of the problem may be different. For example, stealing from a teenager’s perspective may involve taking small amounts of money from home or school, whereas, in adults, this might involve embezzlement and fraud involving many thousands of dollars. This raises the possibility that one might obtain more accurate estimates of the true magnitude of problem gambling in adolescents by quantifying the degree of ‘harm’ that results from each behaviour. Unfortunately, it is difficult to envisage how this might be achieved without raising other objections. A harm measure is an entirely relative concept, and it is conceptually awkward to define problem gambling only in terms of its consequences, without reference to the behaviour itself (Walker, 1995). For these reasons, this issue will almost certainly remain an ongoing focus for future analysis and debate.

The international comparisons provided in this paper indicate the significant role played by legislation and variations in accessibility for specific types of gambling. In terms of minimising the potential harms to young people, South Australia has clearly benefited from its policy of imposing strict guidelines on the availability of gambling opportunities for young people. Although it is clear that a few young people are still, either directly or indirectly, gambling on adult products, most adolescent gambling does not appear to be strongly venue-based. Instead, most gambling involves young people visiting lottery venues and newsagents to purchase scratch cards and lottery tickets, boys running private card games, or betting on the outcomes of games or sporting contests. A few may also be running small-scale racing sweeps amongst class-mates or asking others to place bets on their behalf at racing venues or via telephone betting systems. So far, there is very little evidence to suggest that Internet gambling is a source of problematic gambling for South Australian adolescents; although, of course, it remains to be seen whether this is so in the future. By contrast, the United Kingdom provides a graphic illustration of the magnitude of the problem which arise when gambling is readily accessible and marketed so that it is appealing to youth (Griffiths, 1995). This extends not only to fruit machines, but also the recently introduced National lottery, which is marketed to make it appealing to young people (Griffiths & Woods, 2001). In Australia, lotteries are generally less popular amongst younger age-groups (Productivity Commission, 1999), and is marketed with a stronger focus upon middle-aged to older people, currently the lottery’s strongest market segment.

This paper also confirmed the strong role played by social norms and beliefs. Consistent with Moore and Ohtsuka (1997), adolescents with a heavier involvement in gambling were more likely to have friends and family who approved of gambling, and who gambled themselves. These adolescents were also more likely to have optimistic views about the potential profitability of
gambling, a finding which confirms, not only the strong influence of social learning and peer relations on gambling, but also the influence of cognitive biases and personal beliefs.

The results also provided further evidence that gambling problems may be influenced by early gambling successes or large wins. This factor has been identified retrospectively in adult problem gamblers (Lesieur, 1984), and appears to already be in evidence within this sample. This effect has been explained in a number of ways depending upon the one’s theoretical perspective. Such early wins are thought to give rise to heightened perceptions of control (Langer & Roth, 1975); as giving rise to rigid schemas identifying the gambler as a winner; or can be explained in terms of basic learning theory, as being attributable to the greater salience of early reinforcements.

Only modest support was obtained for the hypothesis that gambling would be related to variations in economic socialisation and attitudes towards money management. Although, as predicted, adolescents whose parents provided less advice regarding economic issues were less likely to express a future intention to gamble, no other clear associations were obtained, for example, in relation to gambling frequency or problem gambling. This suggests that gambling is much more strongly influenced by gambling-specific attitudes and behaviours than broader differences in how adolescents and their families approach financial issues in general. Another possibility is that, for many families, gambling may be entirely acceptable as long as the amount spent does not go beyond what can be afforded. Thus, while many teenagers may come to perceive gambling as an acceptable past-time through modelling and observing the behaviour of their parents, this does not mean that they gambling more frequently or excessively. As with their parents, adolescents may consider gambling only as minor luxury or source of excitement with little serious consideration given to the possibility of substantial financial gains. It may be that good financial management skills could nonetheless play a significant role in reducing adolescents’ risk of developing gambling-related problems, or controlling them, but such skills may not be related to involvement in general.

In summary, this study provides further evidence that a substantial proportion of Australian adolescents have a current and future interest in gambling, and that these rates are relatively similar across the country. Adolescent gambling appears to be related to the experience of early gambling successes, and optimistic attitudes towards gambling, and positive attitudes amongst parents and peers. It was also found that the frequency of gambling was found to be highest in Year 10-11 students, and lower in Year 12s, providing further support for the proposed link between gambling and school retention rates. Taken as a whole, these results add support to recent suggestions for greater adolescent education concerning the potential risks of problem gambling. From these results, it would appear that such initiatives would be best served by targeting Year 9-10 students because this appears to be the age when the interest in most strongly developed, and when most adolescents who gamble are still at school. These initiatives could involve not only the students but also parents and teachers to help them identify the indicators of problem gambling in the school or at home.

A further possibility for future research is also the possibility of exploring the effectiveness of providing information about the true odds of gambling to teenagers, for example, in mathematics classes, so that they can make informed choices about their gambling before they get too heavily involved. In principle, this appears to be a useful idea. However, so far there is little compelling evidence to indicate whether this will be effective. This is because of concerns about whether such ‘cold’ statistical information will have any influence on personal belief systems, which are often highly resistant to change (Delfabbro, 2001; Ladouceur, 2001). That is, one can teach adolescents that they cannot win in the long-term, or that the odds are very poor, but adolescents will be aware of others who have been successful, and may believe that they are different or
‘luckier’ than others. These issues will be investigated in the next stage of this ongoing research project.
References


Differences in attitudes towards psychological help among Vietnamese and Australian-born respondents

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Abstract

Under-utilisation of health services among Australian migrants has been a challenge for mainstream health service providers. Since help seeking behaviour is unique to specific cultural groups, this paper examines the differences in attitudes towards psychological help seeking between the Vietnamese- and the Australian-born respondents. A sample of 131 participants (62 Vietnamese born, 69 Australian born) answered the Attitudes toward Psychological Help Questionnaire (Fischer & Turner, 1970). It was hypothesised that Vietnamese-born participants have: (a) less recognition of need for help, (b) less confidence in helpers, (c) lower stigma tolerance, (d) less interpersonal openness, and (e) less knowledge regarding where to seek help compared to Australian-born counterparts. Discriminant analysis showed that recognition of need for help, stigma tolerance, confidence in helpers, and knowledge regarding where to get help provided enough information to distinguish the two groups with 75.6% of correct classification rate. Although Vietnamese expressed significantly higher confidence in helpers, they were less certain about where to get help as expected. Australian-born respondents showed both higher stigma tolerance and higher knowledge regarding services available. Implications for counselling services directed to Vietnamese-Australian communities will be discussed.
Introduction

Many people who experience problems with gambling do not seek help. A prevalence study conducted by the Productivity Commission (1999) revealed that 80 per cent of all Australian adults report that they have gambled at some time, 40 per cent do so regularly, 2.3 per cent (330,000 people) experienced significant problems and 1.7 per cent (240,000 people) may be construed as compulsive, pathological or severe problem gamblers. However, only 0.8% (111,000) stated that they would like help for their problem and only half of these people (0.4%) attempted to access helping services. In sum, only approximately one tenth of people who experience problem gambling actually seek help for their problems.

Several reasons are cited as to why people with gambling problems do not seek professional help in the literature. These reasons include limited knowledge of available services, lack of awareness regarding the severity of problems, cultural and or gender factors and the stigma associated with gambling problems (Beattie, Blaszczynski, Maccallum & Joukhador, 1999; Productivities Commission, 1999; Tran, 1999). Those who seek help primarily do so as a result of a crisis stemming from major financial difficulties, family breakdown, job loss and or criminal charges. Differences in reasons for people to seek help or not pose two questions: firstly, whether people simply lack resources to access gambling counselling services and secondly, whether they have negative attitudes toward seeking psychological services? The aim of the current study was to find answers for these questions.

There are a number of factors often cited as reasons individuals may not access services. A help seeker must possess basic resources such as (1) the knowledge of available services and (2) availability of helpers from a similar cultural, ethnic and linguistic background. Previous studies also found that these factors are the two powerful predictors of psychological help seeking (Delphin & Rollock, 1995), especially for those who found themselves marginalised in our society. A sense of alienation is often associated with one’s ethnicity. However, it is not entirely clear whether a sense of alienation with regard to ethnicity changes over time or since the individuals’ arrival in the host country. That is, whether there is difference between people who were born overseas and those who were born in Australia in this regard that explains their help seeking behaviours.

Since help seeking behaviours are unique to specific cultural groups, this paper examines the differences in the attitudes towards psychological counselling help seeking between the Vietnamese- and the Australian-born respondents. Further, it investigates if linguistic and cultural differences are a barrier to seeking help and whether acculturation influences their knowledge and confidence in accessing services.

It was hypothesised that Vietnamese-born participants would show: (a) less recognition of the need for help, (b) lower stigma tolerance, (c) less interpersonal openness, (d) less confidence in helpers, (e) less knowledge regarding where to seek help, and (f) more likely to prefer helpers from own cultural group, compared to Australian-born counterparts.

Method

The data of this study was extracted from a larger study of psychological help seeking of ethnic Australians (Duong-Ohtsuka, 2001). To understand the impacts of cultural factors on attitudes toward psychological counselling help, this study selects and investigates experience of those who were born in Vietnam and in Australia.
Participants

One hundred and thirty-one adult Melburnian sample included 61 Vietnamese-born (22 male, 39 female) and 70 Australian-born (23 male, 47 female). The Australian sample included people from different cultural groups, which make up people from Asian-, European-, and Anglo-backgrounds.

Measures

Data identified based on (1) place of birth (Vietnamese-born and Australian born participants were selected, and gender differences. The questionnaire was available in both English and Vietnamese. The Vietnamese language version questionnaire was back translated to ensure the reliability and validity of quality of translation.

Attitudes toward Psychological Help Scale (ATPHS) (Fischer & Turner, 1970): ATPHS comprises 29 items developed to assess attitudes toward seeking professional counselling (Fischer & Turner, 1970). The questionnaire has four subscales: Recognition of need for psychological help, stigma tolerance, stigma concerns, interpersonal openness, and confidence in psychologists. The reliability of the four subscales reported by Fischer and Turner (1970) ranged between .83 and .86. Internal consistency of the scale is .83. All items were measured by a 7-point Likert scale regarding a likelihood for an action described in each statement (1 = Extremely unlikely, 2 = Very unlikely, 3 = Slightly unlikely, 4= Neither, 5 = Slightly likely, 6 = Very likely, and 7 = Extremely likely), or on a degree of agreement with a view expressed in each statement (1 = Extremely disagree, 2 = Very disagree, 3 = Slightly disagree, 4= Neither, 5 = Slightly agree, 6 = Very agree, and 7 = Extremely agree).

Recognition of the need for help comprises eight items assessing whether respondents think that psychological or emotional problems are issues that may demand professional attention. The highest possible score is 56 and the lowest possible score is 8. Higher scores represent greater awareness for the need for seeking professional help.

Stigma tolerance contains five items assessing respondents’ ability to disregard stigma associated with seeking help for psychological or emotional problems. The highest possible score is 35 and the lowest possible score is 5. Higher scores on stigma tolerance indicate a higher level of tolerance against stigma associated with seeking professional help.

Interpersonal openness consists of seven items assessing respondents’ willingness to disclose their problems with professional helpers. The highest possible score is 49 and the lowest possible score is 7. Higher scores indicate a higher level of willingness to discuss one’s problems with others.

Confidence in helpers consists of nine items assessing whether respondents believe that psychologists or counsellors can help with their problems. The highest possible score is 63 and the lowest possible score is 9. Higher scores represent a higher level of confidence in helpers regarding their ability to help the client.

Knowledge of available services is a single item asking respondents if they know how and where to get help in case they needed to. The highest possible score is 7 and the lowest possible score is 1. Higher scores represent better knowledge regarding available services.
Preferency of ethnically similar helpers is a single item question asking whether the ethnic background of professional helpers is an important factor when seeking professional help. The highest possible score is 7 and the lowest score is 1. Higher scores indicate higher preference of helpers from the similar ethnic background.

**Results**

All statistical tests were two-tailed tests using an alpha level of .05. Table 1 shows means and standard deviations for six factors for Australian-born and Vietnamese-born groups.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Unweighted</th>
<th>Weighted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Born in Australian</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge of services</td>
<td>5.5429</td>
<td>1.3903</td>
<td>70</td>
<td>70.000</td>
</tr>
<tr>
<td>Recognition of need for help</td>
<td>36.8429</td>
<td>8.5865</td>
<td>70</td>
<td>70.000</td>
</tr>
<tr>
<td>Stigma Tolerance</td>
<td>25.3429</td>
<td>5.9023</td>
<td>70</td>
<td>70.000</td>
</tr>
<tr>
<td>Interpersonal Openness</td>
<td>32.5000</td>
<td>6.9527</td>
<td>70</td>
<td>70.000</td>
</tr>
<tr>
<td>Confidence in helpers</td>
<td>41.4429</td>
<td>7.5347</td>
<td>70</td>
<td>70.000</td>
</tr>
<tr>
<td>Prefer councillors from the same ethnic background</td>
<td>3.7286</td>
<td>1.9849</td>
<td>70</td>
<td>70.000</td>
</tr>
<tr>
<td>Born in Vietnam</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge of services</td>
<td>4.8197</td>
<td>1.8395</td>
<td>61</td>
<td>61.000</td>
</tr>
<tr>
<td>Recognition of need for help</td>
<td>35.2951</td>
<td>6.2566</td>
<td>61</td>
<td>61.000</td>
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<tr>
<td>Stigma Tolerance</td>
<td>23.1148</td>
<td>6.0994</td>
<td>61</td>
<td>61.000</td>
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<tr>
<td>Interpersonal Openness</td>
<td>30.2623</td>
<td>7.2707</td>
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<td>61.000</td>
</tr>
<tr>
<td>Confidence in helpers</td>
<td>44.2459</td>
<td>7.7796</td>
<td>61</td>
<td>61.000</td>
</tr>
<tr>
<td>Prefer councillors from the same ethnic background</td>
<td>4.6721</td>
<td>2.0226</td>
<td>61</td>
<td>61.000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge of services</td>
<td>5.2061</td>
<td>1.6489</td>
<td>131</td>
<td>131.000</td>
</tr>
<tr>
<td>Recognition of need for help</td>
<td>36.1221</td>
<td>7.6027</td>
<td>131</td>
<td>131.000</td>
</tr>
<tr>
<td>Stigma Tolerance</td>
<td>24.3053</td>
<td>6.0750</td>
<td>131</td>
<td>131.000</td>
</tr>
<tr>
<td>Interpersonal Openness</td>
<td>31.4580</td>
<td>7.1632</td>
<td>131</td>
<td>131.000</td>
</tr>
<tr>
<td>Confidence in helpers</td>
<td>42.7481</td>
<td>7.7483</td>
<td>131</td>
<td>131.000</td>
</tr>
<tr>
<td>Prefer councillors from the same ethnic background</td>
<td>4.1679</td>
<td>2.0500</td>
<td>131</td>
<td>131.000</td>
</tr>
</tbody>
</table>

To determine whether there are any differences in the six factors between the two sample groups, a series of one-way analysis of variance (ANOVA) was carried out. Figure 1 shows score differences between the two groups for the six factors.
One-way ANOVAs show statistically significant differences between the two sample groups on the following factors: Knowledge regarding services, $F(1, 137)= 8.99, p=0.003$; Stigma tolerance, $F(1,135)= 4.15, p=0.044$; Confidence in helpers, $F(1, 132)=4.70, p=0.032$; and Preference of ethnically similar helpers, $F(1, 136)=5.67, p=0.019$. However, there were no statistically significant differences between the two groups on Recognition of the need for help, $F(1, 135) = 1.44, p = .23$, and Interpersonal Openness, $F(1, 136) = 3.28, p = .07$.

Hence, Australian-born respondents know significantly more about the services available and more confident in accessing them, and show higher stigma tolerance compared to Vietnamese-born respondents. However, Vietnamese-born respondents hold higher levels of confidence in professional helpers’ ability to address their problems and show more positive attitudes regarding getting help from professional helpers with ethnically similar backgrounds than Australian-born respondents. There were no differences between the two groups in recognition of the need for help or in the levels of interpersonal openness.

In fact, these factors on professional help seeking together provide sufficient information to distinguish the two groups. A discriminant analysis found that knowledge of services, recognition of the need for help, stigma tolerance, interpersonal openness, confidence in helpers, and preference of ethnically similar helpers together provide information sufficient to discriminate between the two groups with 75.6% of correct classification rate (see Table 2).
Table 2. Summary Of Discriminant Analysis Using Six Attitudinal Factors Towards Professional Psychological Help Seeking

<table>
<thead>
<tr>
<th>Predicted Group Membership</th>
<th>Are you born in Vietnam?</th>
<th>Australian born</th>
<th>Born in Vietnam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Count</td>
<td></td>
<td>51</td>
<td>19</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>72.9</td>
<td>27.1</td>
</tr>
<tr>
<td>Australian born</td>
<td>13</td>
<td>48</td>
<td>61</td>
</tr>
<tr>
<td>Born in Vietnam</td>
<td>21.3</td>
<td>78.7</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* 75.6% of original grouped cases correctly classified.

Discussion

The results of the current study showed differences in attitudes towards seeking professional help between Australian-born and Vietnamese-born respondents in their levels of stigma tolerance, confidence in helpers, knowledge of services, and preference of ethnic similar helper.

Hypotheses (b), (d), (e) and (f) were supported. As hypothesised (Hypothesis b), Vietnamese-born respondents showed less stigma tolerance compared to the Australian-born group.

Contrary to Hypothesis (a), there was no evidence for higher awareness of recognition of the need for help for Australian-born participants. Regarding interpersonal openness (Hypothesis c), the differences between the two groups did not reach statistical significance although the trends of more openness for Australian-born respondents were observed.

An analysis of hypothesis (d) regarding confidence in helpers produced unexpected results. Hypothesis (d) found strong support although the direction of effect was opposite. Vietnamese-born respondents know less about available service provisions but placed higher levels of confidence in helpers. Vietnamese-born participants, while having higher confidence in helpers’ abilities and a lower level of stigma tolerance, had less knowledge regarding where and how to get help. Also they were more likely to prefer helpers from their own cultural background when deciding to seek help.

Since the majority of Vietnam-born respondents are relative newcomers to the host country arriving after 1975, it is not surprising that they may feel alienated and are unsure about where to get help. A language barrier further makes it difficult for them to locate resources or obtain information. However, what is less clear is why they have a high level of confidence in psychological helpers. Given that Vietnamese-born respondents came from a country where psychological services are difficult to find and remains foreign to many, their high levels of confidence in professional helpers may be a blind trust. In normal circumstances, a high level of confidence in helpers would predict positive attitude in seeking professional help and therefore is a welcome trend. However, if the confidence in helpers is based on the unrealistic expectation that the professional helpers would sort out all the problems surrounding clients immediately, a backlash may occur. Anecdotal evidence abound that few Vietnamese seek professional psychological help willingly, but when they do, often the expectations they have of counsellors is high. For example, they may expect a counsellor to be able to provide financial relief, resolve
their court cases, or dissuade their partner from filing a divorce, etc. While lack of understanding about the counselling processes may reinforce high confidence in professional helpers, a failure to acknowledge limitations or client’s responsibility regarding therapeutic processes may result in disappointment and a high dropout rate.

In addition, high expectations and misunderstanding regarding psychological services may provide a basis for stigmatisation. The results of the current study indicate a lower level of stigma tolerance amongst Vietnamese-born participants compared to Australian-born participants. The lack of insight regarding psychological services may reinforce and perpetuate a stigma associated with psychological help seeking. Fear of stigmatisation associated with psychological help seeking has been documented not only among the Vietnamese community, but also other migrant groups such as Arabic speaking Australians (Beattie, Blaszczynski, Maccallum, & Joukhador, 1999; Productivity Commission, 1999). Commonly, people who came from countries where psychological services are not readily available would often associate psychological help seeking with a mental illness. The reluctance to seek professional psychological help combined with the lack of knowledge about these services would encourage people to resort to self-help or “helpers” who make themselves available within their family, the network of friends, spiritual leaders in the community or general practitioners of medicine. This would especially be in the case of problems that manifest themselves as physical symptoms.

Although the findings seem to provide insight about how ethnic community members perceive professional psychological help seeking, the result of the current study should be interpreted with caution. Although the Vietnamese-born sample constituted a group of overseas-born population, their views regarding seeking professional psychological help may not be representative of other ethnic and cultural groups. Generalisation of the results should be carried out with a careful consideration of demographic and cultural factors when the implications of the current research are extended to other cultural groups. Further, the cultural uniformity of the “Australian-born” group must not be taken for granted since this group includes people from various cultural backgrounds. Compared to Vietnamese-born respondents, the Australian-born respondents share only one common feature of becoming Australian by virtue of birth and of spending most of their time in Australia.

By considering people were born in Australia as a homogeneous and as a single subculture, the cultural influence of the majority culture may be overestimated in relation to the formation of attitudes toward seeking professional psychological help. Further research thus would be essential to investigate whether attitudes towards professional help seeking of migrants would change as the years pass by since their arrival to the host country. The results of the current study suggest that the longer the time since the arrival to the host country, the less stigmatisation is associated regarding psychological help-seeking, the more knowledge and better understanding about psychological services, and hence more realistic expectations regarding ability of professional helpers, experience less barriers to psychological services hence less emphasis on culture-bound services. However, the individual acculturation process would inevitably interact with the cultural values and attitudes of each person. For this reason, a simplistic expectation that the acculturation is a monotonic function of time may not be applicable.

As an extension of the current investigation on psychological help seeking, further research would benefit from considering within group differences in a migrant group. An investigation of the relationship between acculturation experiences, modes of acculturation, and attitudes towards help seeking, may further enhance understanding the experience of people within specific cultural groups.
Overall, help seeking for gambling problems may be misdirected. It has been commonly recognised that people who encounter distress may experience it emotionally/psychologically or physically (Brown & Coventry, 1997; Dinges & Cherry, 1995; Lin, Inue, Kleinman, & Womack, 1982). Service provision and research on psychological help seeking seem to focus on the psychological experience but place less emphasis on the somatic experience arising from psychological or social distress.

Somatisation, a form of expression of distress through bodily complaints, is often overlooked in psychological services. A high percentage of cases presented to Gambler’s Help problem gambling counselling services include complaints regarding physical symptoms (Jackson et al., 1999). However, it is not known if these symptoms are being addressed. Because psychological services are traditionally known to deal with emotional or psychological symptoms, potential clients who experience physical symptom stemming from psychological distress may seek help only from medical practitioners. Clinicians who fail to recognise the psychological origin of somatised symptoms in clients may further reinforce greater somatisation on the part of the client, a vicious circle of inappropriate treatment and misuses of medical services would ensue.

Vietnamese-born clients, unfamiliar with psychological help provision and little knowledge on the psychological process, would use somatisation as a main form of expression of psychological distress. Although somatisation is commonly found in all cultural groups, it often constitutes the main form of symptom expression for people from Asian, African and Hispanic backgrounds (Kirmayer, Dao, & Smith, 1998; Kirmayer, 1989). In contrast, people from West European background more frequently employ psychologisation. Hence, a barrier to services is much subtler than a linguistic barrier. Gambling counselling services often expect a certain level of psychologisation, openness to share problems with the counsellor, and an expectation of the client to use communication skills effectively to verbalise concerns. Although this approach to psychological services may be attractive to those who have a tendency of psychologisation, a client opting for somatisation to express psychological problems will not receive much benefit from the service. Although somatisation is widely noted by the practitioners and the researchers in the gambling research community, there is an urgent need for a systematic research on how psychologisation/somatisation would influence professional help seeking behaviours.

To promote service utilisation for prospective clients, a holistic approach to the problem may be required. Public awareness campaigns regarding problem gambling should include symptoms of somatisation as well as those of psychologisation. Service providers must consider both psychological and physical problems from psychological, biological, and social perspectives. Failing to recognise the importance of all three aspects may result in less than adequate service provision.
References


Cultures collide law and social science: Mental health expert and problem gamblers in court

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Abstract
The meeting of the cultures of law and social science in the Courtroom can create mutual disillusion and scepticism. This paper examines the role of the mental health expert in relation to giving evidence to a Court on a problem gambler. An understanding of the legal context in which evidence is presented and the role of the expert in the Court process is important for the expert to be able to prepare relevant material. Maintenance of ethical standards is fundamental to enhancing the likelihood of an optimum outcome for the offender and the broader community. This paper outlines conditions by which a mental health expert witness can be of value to the decision making process of the Court. Two case studies of gambling related offences are used as illustrations. In keeping with the theme of this conference, these case studies indicate how cultural circumstances can create vulnerability to dysfunctional behaviour, in this instance, inappropriate levels of gambling.

Clash of cultures- Law & Social Scientist (Psychologist)
Judge Lord Campbell spoke about the expert:
“Skilled witnesses come with such a bias on their minds to support the cause in which they are embarked, that hardly any weight should be given to their evidence.” (Phillips and Bowen, 1985, 83)

The law and the Courts look to social science and mental health experts to provide something they cannot.

The law relies on precedence; and hierarchy, wisdom resides in the Judge and the Courts. Psychology emphasises creativity and rewards novelty.
The assessment of truth in law is discovered through adversarial contest; with psychology the search for truth is looked in experimentation.

The mental health expert needs to understand the culture of the legal system and operate as effectively as possible within its rules, if one is to be of assistance to patients and clients.

This paper sets out the context in which a Court permits the evidence of mental health experts. Two case studies of gambling related offences are used as illustrations. In keeping with the theme of this conference, these case studies indicate how cultural circumstances can create vulnerability to dysfunctional behaviour, in this instance, inappropriate levels of gambling.

**Context of Expert Evidence**

**Why the apprehension of mental health expert witnesses?**

Most frequent criticisms are:

- The misuse of professional imprimatur: cases where expert opinion may be superfluous, inconclusive nature of evidence and the application of social research to ideograph circumstance.

- The Misuse of Professional Imprimatur
  The hired gun, where litigants and experts are under the misapprehension that the bill is paid because the expert will give evidence the way they would like him to. Disquiet may also be caused in cases where expert opinion may be over or under valued because of need to reach a conclusion.

- Research and Ideograph Presentation
  The notion that psychosocial research findings can be used with confidence to explain the behaviour of a particular individual and thereafter to predict the behaviour of the individual (Melton, G. B. Petrila, J. Poythress, N. G. and Slobogin, C. 1997).

- The Inconclusive Nature of Evidence
  The uncertainty of diagnosis specific conditions (Ennis & Litwack 1974, 706).

Further uncertainty is generated by the apparent cultural dependency of diagnostic patterns between western cultures. The differences were reflected in a study by Katz in the United States of America and the United Kingdom (Bartholomew & Milte 1976). This study observed the differences in diagnosis made by an American Psychiatric audience and a British audience at Maudsley Hospital, London. One third of the American audience diagnosed the patient on film as having some kind of schizophrenia while none of the British audience made a similar diagnosis.

One of the principle concerns in this disparity of diagnosis is of course how this individual would be treated by an expert should he wish to plead insanity. The figures suggest he would have a ten times better chance of being diagnosed as insane by an American trained psychiatrist rather than a British-trained psychiatrist.

This doubt is heard in the words of Lawton J:

> “In the lush pastures of the Common Law a number of sacred cows graze and no-one dares to cull them or even try to make them healthier. One
answers to the name of ‘expert evidence’. .... It is a scraggy animal, despised by many, yet its continued existence is essential for the proper administration of justice. Properly cared for it could provide good progeny but the breeding would have to be selective as some strains may not be worth encouraging.” (Lawton 1981, 237)

His Honour refers to mental health experts who take up the cause and believe it is their duty to keep their client out of jail and to give a complete picture of their patient or client. Though it may appear well intended, this approach does not necessarily assist the Court in understanding the behaviour of an offender. Our understanding must come from clinical observations, objective evaluation of the offender, honesty in reporting and conforming to the rules of the Courtroom. If the Court detects that our expert testimony is generated by motives other than informing the Court, the evidence loses its power and the witness loses credibility.

Gambler’s Help

As a Gambler’s Help counsellor we are asked to prepare reports for the legal system. The most likely requests are from solicitors or correctional services, to report progress of a current client. However there are times when someone will present requesting an assessment for an imminent Court appearance.

How each gambling counsellor performs an assessment depends on training and resources available, but whatever is written has to be carefully prepared, bearing in mind that one could be called to explain under oath why the wording of the report was chosen, what assessment tools were used, why others were not and other hurdles.

Admissibility of Expert Evidence

An expert witness is an exception to the rule that witnesses are only able to testify on those things that they personally saw or heard or experienced. An expert witness is able to express an opinion and draw inferences.

There are three broad areas to consider in assessing the admissibility of evidence which are set out in the leading judgement of Kirby J on an Appeal to the High Court Farrell v The Queen (1998) 155 ALR 652.

Expertise Rule: Stringent scrutiny of the expertise of a witness. An expert witness must be qualified and the question of whether the necessary qualifications are met is the decision of the judge or magistrate. The expertise of the witness must be relevant to the matter at hand. Cross-examination may include questions of one’s current knowledge, and opinion on recent - sometimes obscure - publications.

Common knowledge rule: evidence is pertinent where a tribunal of fact requires aid in attempting to resolve matters of technical or scientific nature beyond the realm of experience of lay people (Freckelton, 1987). This is the idea that the testimony is about a body of knowledge or experience, which is based on reputable theory within that field.

The relevance of testimony: that is, whether the Court could derive assistance from the proposed evidence and the weight that should be attached to the evidence.
Together these three domains define the scope of the exception to a fundamental rule of law, namely that a witness can only give evidence that they have observed.

What is the key issue for problem gambling experts?
“The Court needs assistance on the impact that the dependence on gambling has had upon the capacity of the individual to function clear-sightedly and rationally, evaluating options and foreseeing consequences.” (Freckleton, 1994)

He feels that this is the question which is the most important and which we often fail to address.

Case Studies
Having established the general rules of acceptance let us briefly turn our attention to two different cases.

These offenders, both women have several characteristics in common.

1. Could not control their poker machine playing
2. Were migrants to Australia
3. Were cast in the role of principal nurturer and carer in their families
4. Had limited social activity
5. Had no previous history of illegal activity
6. Had not sought help in relation to their gambling behaviour
7. Committed serious offences

R v Raffaela C (1996)

Ms. Cavallin was born in Italy and came to Australia with her parents when she was a child. When she was 3½ she was hit on the head by an axe and needed speech therapy for 15 years. She had married at 18 but the marriage dissolved the time she was 23 because her husband was violent towards her. Since then she lived with her parents. She spends most of her leisure time caring for her parents. Her brother has been a heroin addict for 20 years and has served terms of imprisonment. She was employed as a laundry worker. In 1994 she was retrenched and paid a lump sum of $27,000 as compensation. However by early 1995 she was heavily in debt to institutional lenders and other people. Psychological testing indicated below average intelligence and characteristics of an anxiety disorder. The Court accepted that Ms. Cavallin was seriously addicted to gambling by way of poker machines.

Next door to Ms. Cavallin and her parents lived an 81-year-old widow. She was on close and friendly terms with the family who had known her for at least 20 years. The old lady was very nice to Ms. Cavallin. During 1995 the old lady lent Ms. Cavallin various sums of money which loans were recorded in her bank passbook. It was the usual practice for the old lady to fill out a withdrawal form and telephone the bank to let them know that Ms. Cavallin had her permission to withdraw the money. It happened that 14 years before the old lady and her late husband had been the victim of an armed robbery at their house. Three armed men had burst into their home and demanded money. A week before Christmas 1995 the old lady went to her door and noticed a note on the mat. It said:

“A few years ago I tried to get money off you I held a gun at your face now I know you have the money in the Bank I was in there last time you
were in the bank and I heard talking I follow you home I want $5,000 in 100 dollar bills to the bank Monday morning get the money and bring it home don’t tell anyone and don’t go to the police because they can’t guard you all the time and I will come and get you somehow.....I’ll come after you and fix you right up ...I have bugged (sic) your phone and... get the money shut your mouth all will be okay ..”

Predictably, this note had an extremely distressing effect on the old widow. Ms. Cavallin followed the delivery of the note with a telephone call the next day with a husky voice, saying, “If you don’t get the money I will blow your house up”. The old lady telephoned the police.

In April 1995 Ms. Cavallin pleaded guilty to blackmail. A psychologist prepared a report which included the words “....the offending for which she faces the Court took place, essentially in the context of reduced judgment and desperation.” Ms. Cavallin was sentenced to two years’ imprisonment, 18 months of which was suspended. Her gambling problems were placed to the forefront of the submissions for leniency.

An appeal was made to the Supreme Court for reduction of sentence in relation to the weight that the sentencing judge gave the psychologist’s report. The contention being that her behaviour was mitigated by her gambling problem and the judge misunderstood the unmanageable grip in which the addiction of gambling held the applicant. In dismissing the appeal it was found that “.... this instance of blackmail was a crime of violence directed towards the victim. A person who was especially vulnerable, and the applicant’s conduct directed to her was of a particularly mean kind.”

The judge had not erred in straying beyond the range of sentence that was open to him.

If we consider the three principles of admissibility of expert evidence in this case;

1. **The expertise rule:** in this case the Court accepted that the psychologist was an appropriate expert,
2. **Common knowledge rule:** evidence was useful to the Court in attempting to resolve matters of nature beyond the realm of experience of lay people, and that the knowledge is based on reputable theory within that field.
3. **Testimony is relevant:** the Court could derive assistance from the proposed evidence and could attach weight to the evidence.

The weight given to his opinion was decided by the presiding Judge and supported by the appellant Judge.

Ms. Cavallin had pleaded guilty and therefore there was no Jury, however in our next case of Mrs. Yu a jury was present in a trial for manslaughter.


Mrs. Yu was born in China in 1960 into a happy, reasonably affluent family. She performed well academically and made many friends with no discipline problems at school. After Year 10 she was sent to the country for 2 years (the last group to be sent to work as a peasant as part of the Cultural Revolution). Her ambition was to be a good wife and mother. She met her husband 10 years before they married. He travelled to Australia to better his prospects, she followed in 1988 and they married in 1989. Her family were not happy. She worked in the clothing industry from home.
There were three children of the marriage. The first child was born in 1995.

The psychiatrist said that her "very significant" gambling difficulties began when she stopped work to have children. There was certainly an element of loneliness and lack of socialisation in Mrs. Yu's life in that she had very little contact with non-Chinese-speaking people, particularly following the birth of her children and her removal from the workforce.

She was an intelligent woman whose problems had reached the point where she was almost constantly preoccupied by the thought of poker machines, although she probably only actually attended such venues two or three times a week, nonetheless the thought and the preoccupation, and a sense of anxiety and guilt and apprehension, was with her far more frequently.

One morning in February 2000 Mrs. Yu had been at home performing the usual tasks that she had. That included feeding her two sons and arranging for the elder son who was about 7, to be taken to school. Her younger son, about 18 months old, had his breakfast at the same time. She left her three-month-old daughter at home with her husband, who had worked as a waiter at night and was asleep.

She took the older boy to school and about 9 o’clock came back to the house. By that time the younger boy was asleep in his child restraint seat in the car. Mrs. Yu found her daughter and husband still asleep and she decided to go the local Hotel to play gaming machines.

Her son was still asleep in the car and they arrived at about 9.15 am. In the record of interview Mrs. Yu said: “I thought I will just play for a while and if I can win $10 or $8 I can shop for more things”. The car park was open and asphalt. The child was still asleep and the car was left with the windows wound up, so that nobody would be able to get at the child while he was in the car.

Later that morning her husband woke up and went to the Hotel where he found his wife playing machines in the gaming area. There was an argument and they left the gaming room. In the car they found the baby in a comatose state. They immediately took him to a nearby hospital where he was found to have a temperature of 42.3 degrees Celsius. He was pronounced dead in the Royal Children’s Hospital on 22nd February 2000.

Mrs. Yu was charged with manslaughter and a psychiatric report was prepared.

The psychiatrist was of the opinion that the mental state described by Mrs. Yu at the time of the alleged offence did not constitute mental impairment

“...the extreme distraction she described was of a temporary nature. Nonetheless, the combination of her lack of awareness of the potential danger the closed car represented to her son and the severity of her addiction to gambling count as strong mitigating factors...”

Mrs. Yu reported she had cried every day for two hundred days since the death of her son.

It is on this basis that the presiding judge heard the evidence on a voire dire.

Voir dire- that is the jury were asked to leave the Court, so that His Honour could decide whether the evidence was admissible before the jury heard it. He ruled that it was not admissible because it was evidence personal to Mrs. Yu and therefore not relevant to the objective test that the jury had to apply - whether her standard of care was so far removed from that of a reasonable person, as to constitute gross negligence. He found that the objective test did not need to take into account the mental condition of the accused at the time.
Some parts of the record of interview were removed from evidence because of the difficulties the accused had with English and lack of understanding of the legal process.

Looking back at the admissibility of evidence criteria in this case:

1. **Expertise Rule:** The Court accepted that the expert had the necessary qualifications and that the expertise of the witness was relevant to the matter at hand.
2. **Common knowledge rule:** The Court accepted that the evidence was pertinent because the Court required aid in attempting to resolve matters beyond the realm of experience of lay people, and the testimony was about a body of knowledge that is based on reputable theory.
3. **The relevance of testimony:** This was decided against - that is, the proposed evidence was not relevant to the objective test before the jury. This evidence was therefore relegated to the plea hearing.

The Judge would have been mindful of the judgment in *R v. Pascoe* 29th April 1998

Victorian Supreme Court 29.4.98 Winneke P:

“This Court has noted on more than one occasion, and it should, in my view, be accepted, that it will indeed be an unusual case where a person can justifiably call for mitigation of penalty on the grounds that his crime was committed in order to feed a gambling addiction.”

The psychiatrist’s report was heard by His Honour as part of the plea. Mrs. Yu was found guilty of manslaughter and given a suspended sentence.

**Summary**

The Court decides admissibility of evidence; what can we do?

Expert witnesses who wish to avoid distortion of their testimony and damage to professional reputation must:

- Become familiar with courtroom procedure, rules of evidence and ways of presenting psychological data to a jury or the Bench
- Have well-prepared reports and other evidence
- Stick to one’s own area of expertise and be explicit and open
- Be familiar with what advice is given by lawyers about how to cross-examine a mental health expert
- Ensure that expressed opinions are well founded in fact and that the factual basis and process of reasoning for such opinions can be clearly explained to the court.

Maintenance of these standards is vital to -

- Maintain the reputation of our profession by operating as effectively as possible within the rules
- For our area of specialisation to be understood in a Court of law.
- Enhancing the likelihood of an optimum outcome for the offender and the broader community.
References


Delivering responsible gambling

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Introduction

The Australian Gaming Council, formed in June 2000, is the first national industry organisation
dedicated solely to gambling issues. Our members include leaders from all aspects of gambling –
wagering, lotteries, casinos and gaming.

Our Board is comprised of:

- Ross Wilson, Chairman, Chief Executive Officer of TABCORP Holdings
- John Ballesty, General Manager, Canterbury Leagues Club
- Duncan Fischer, Chief Executive Officer, Tattersall’s Holdings
- Ian Johnson, Chief Executive Officer, Crown
- Geoff Rankin, Vice President Retail, ALH Group
- Des Randall, Chief Executive Officer, Aristocrat Technologies
- Warren Wilson, Chief Executive Officer, TAB

We recognise and acknowledge that some of our customers have problems with their gambling,
with devastating consequences for themselves and their families and costs for the broader
community. We acknowledge that we have a responsibility to prevent and reduce the potential for
people to develop problems. We also seek to provide a forum for informed and constructive
dialogue and to be a bridge to other stakeholders.

We also recognise that gambling is a major industry that provides significant employment,
economic and entertainment benefits that are enjoyed by a majority of Australians.

Our objective to achieve the long-term sustainability of the gambling industries, is to continue to
provide economic and entertainment benefits and to develop and promote measures that prevent
and reduce problem gambling.

At its first meetings the embryonic leadership of the AGC took the view that we should not be a
lobby group and this has been constantly reinforced.

They also took the firm view that we should follow the model adopted by the alcohol industry
rather than the tobacco industry. We should acknowledge and manage the subsidiary problems
associated with our products and that this is not only a sensible business decision, but also the
right thing to do.
WHERE TO FROM HERE?
Tobacco versus alcohol

TOBACCO INDUSTRY
• Litigation
• Product devaluation
• Heavy regulation and Taxation
• Ongoing Community Opposition

ALCOHOL INDUSTRY
• Identified and acknowledged problem
• Implement responsible drinking programs
• Co-regulation
• Broad community acceptance

The route taken by the tobacco industry was to deny any problems associated with their products and to instead fight case by case in the courts in the face of mounting and irrefutable medical evidence and adverse public opinion.

The alcohol industry in contrast, acknowledged the costs associated with consumption of their product and set about to reduce these costs by research, education and training. Initiatives like light beer, better labelling to indicate alcohol content and the responsible service of alcohol, together with tough drink driving laws, have done a lot to stem some the worst aspects of alcohol abuse. Australia is now, per capita, a much lower consumer of alcohol than it was say 20 years ago.

At the AGC our first task was to take stock of opinion leaders and other stakeholders views of our industry.

The sorts of things we heard back were not good - “why don’t they talk to us”, “the industry shows no signs that it is prepared to change”, “they have too much at stake to be willing to do anything about problem gambling.”

There was one single overriding issue – the perceived incidence and consequences of problem gambling.

SINGLE OVERRING ISSUE
• Perceived scale and consequences of problem gambling
• Negative community attitudes driving ‘knee jerk’ government responses

Clearly if the industry, especially one as subject to regulation as ours, is to have a long term and healthy future it cannot afford to be out of step with community attitudes. This is particularly true for an industry as comprehensively subject to regulation, as the gambling industry.

The pressure brought to bear can be illustrated below by reference to what is termed the “legitimacy gap”.

This occurs when a business is perceived to be acting outside of community expectations, and political, social and other pressures are unleashed to bridge the gap.

The costs of being out of step include:
• Devaluation of product, customers, employees and investors
• Prescriptive onerous regulation
• Potential litigation
• Increased taxes

The industry’s approach to investing in the prevention of problem gambling may be likened to the investment made by the mining industry in environmental sustainability. Investing to preserve the environment is part of the cost of running the business. It was not only the right thing to do; it made business sense. It is no different in the gambling industries, if we are to maintain a licence to operate that allows us to deliver entertaining products to the vast number of Australians.

It is also worth noting that the mining industry provides only part of a solution to begin turning around environmental degradation. Sustainable ecology relies on a co-ordinated and collective response from many stakeholders including governments, environmental activist groups, individuals, public educators, researchers and individuals.

It requires:
1. Concerted action and a shift in attitudes and behaviours by industry, local communities, activists, governments and consumers;
2. Research into how we can best use our scare resources;
3. Targeted interventions and policies that allow industry to co-exist in an environment that encourages good ecological management, and.
4. Broad based public education and awareness of individual responsibilities and the impact of consumer choice.

In many ways, the environment model demonstrates what it would take to achieve an effective approach to dealing with the economic and social impacts of the gambling in Australia.

With a focus on problem gambling, the AGC held a forum of industry in March of this year. Our task was to set about developing a Code of Practice that could be applicable across the nation for gaming machines to provide a framework that could be adopted for the responsible service and delivery of gaming.

Consequent to the Forum we held often, intense, consultations across industry as to what should be in the Code. We also consulted broadly with other stakeholders to learn from their experience and to incorporate their views. We finally launched the Code a couple of months ago and we have been pleased with the reception from many parties, including community groups, treatment providers and others. The Code is seen as an important first step. We are committed to the ongoing development of aspects of the Code and many of these are marked in the document, for example, a protocol to guide research, which will be developed again in consultation with a range of stakeholders.

Of the many initiatives contained in the Code, staff training has been the most significant and controversial. The aim of staff training is to help staff direct customers who may have problems with their gambling. In doing so we are dedicating a significant part of training on awareness and understanding of potential problem gambling behaviours. A course has been developed by William Angliss College, a leading tertiary institution, again with input from Gamblers Help and
others. Training staff to be aware of potential problem gambling behaviours is not training staff to identify problem gamblers; they are not psychologists and this is not their role. What we are doing though is empowering them to deal better with situations they face daily in venues, such as phone calls from family and friends, distressed customers, requests to borrow money.

In training them to be more aware and how to better handle these situations, staff can assist customers by referring them to treatment providers.

We are proceeding to undertake some research amongst 12 eminent psychologists, here and internationally, including renowned specialists on problem gambling, Professor Ladouceur and Professor Howard Shaffer, both from Harvard University, and Dr Henry Lesieur from Rhode Island Hospital and Brown University. We are asking their view of what behaviours can be observed in the gaming venue, with what degree of certainty and then how staff should proceed to direct customers to assistance. This research will be available early next year.

The Code also commits venues to working more closely with treatment providers. The AGC will have a complete list of treatment providers available on our website and participating members will nominate a venue staff member as a contact point with the local counselling service. The aim is to develop closer relations, so that we can de-stigmatise the process of asking for help. For example, monthly meetings to discuss problem gambling issues with venue staff could only improve our understanding and how to deal with difficult situations.

The Code also talks about consumer information – the aim is to give consumers information on which they can make informed decisions about their play. We are only at the start of providing better consumer information and it is a task that goes beyond the gaming room floor. Children grow up with an awareness of alcohol being an, ‘at risk’ product and we need to get the same message across with gaming machines and gambling.

As with the mining industry, the response of the gambling industries is a vital piece, but not the only part of the puzzle.

Problem gambling behaviours are complex and ambiguous. Defining problem gambling is fraught enough even before we try to understand the many reasons, motivations and triggers to disordered, pathological, problem or other labels given to gambling when it becomes dysfunctional for the consumer.

We need to understand this before we can be confident that we are delivering effective and targeted public education campaigns, prevention and consumer protection measures and treatment programs.

Amongst other issues, it involves an appreciation of the different cultural perspectives and underlying value systems.

A central issue is – if we are to have an effective, coordinated and collective approach to dealing with problem gambling – do we share consistent objectives?

The objective we have outlined for the AGC is that it should be: “A sustainable industry, that provides economic and entertainment benefits, and reduces and prevents problem gambling”.

This clearly contains a number of assumptions:

1. The legitimacy of the gaming and gambling industries,
2. The entertainment benefits to a vast number of Australians, and
3. Our responsibility and role to seek to reduce problem gambling based on quality research and experts advice and stakeholder input.
4. To effectively manage the prevention and reduction of problem gambling we need to unpack some of the ideology that informs the views of many within the industry, social commentators, educators and others.

To discuss the rights or wrongs of gambling from a moral or ideological perspective is of course a legitimate debate. But these arguments need to be kept separate if our objective is informed consumer protection and harm minimisation measures to reduce problem gambling. Clearly there are ideological differences.

Diane Gabb, from the University of Melbourne suggests that, “In some cultures there are sanctions against gambling because of a prevailing view that gaining something purely through luck or chance is morally wrong.”

“Islam and early Protestantism adopted this view and discouraged participation in games of chance, as it somehow represented interfering with divine law.”

In many ways, this mirrors the ambivalent views in our society about alcohol. We have however managed to separate out the public health and social welfare issues from the ideology in effectively dealing with alcohol abuse.

Too often, emotive comments from different camps blur the issues at stake. We risk losing sight of what we are aiming to achieve: to prevent and reduce the harm caused by problem gambling to the community, families and individuals.

Constructive debate is not helped by comments like: “People have been sacrificed on the alter of the profits of the gambling industry”, or “the arms of the smooth-talking gambling industry huckster, seeking new global markets and offering great riches”, or “it is a really obscene industry”; nor “Do problem gamblers exist? I am yet to be convinced of this; however I fully acknowledge that there are people with problems who gamble.”

In a public policy vacuum with little research to call upon, these views often dominate the media stage and lead to “gut-feeling” solutions. We end up with lists, not integrated strategies. When gaming was first introduced in Victoria, for example, it was not to be visible from the street and therefore, natural lighting was often not possible. Then it was decided there should be mandatory light intensity. Now there is questioning whether increased lighting will deter or attract more gamblers.

Clearly, this is a ridiculous situation and involves a lot of wasted resources. We need to do some work to ensure that we have an informed debate. We also need dialogue to see if we can agree a consensus regarding our objectives. The work that has been done by Stephen Richards and the AHA in South Australia is exemplary in this regard.

This raises a related issue – that we all, including industry, need to work to engender some good faith. While there will always be cynics from all walks of life, remaining entrenched and refusing to enter into dialogue is not in the best interests of helping the problem gambler.
We need to recognise the legitimate and important role of government to regulate industry. But that does not override a legitimate role for industry to get its own house in order. We need to create an environment where industry has a legitimate interest to raise standards of practice. Too often government regulation is inflexible and has unintended consequences that often work against the interests of the community and industry. Industry will always be regulated, but if we can demonstrate some ability to self-regulate, then we could avoid some the worst aspects of regulation.

Finally we need to pool resources. Research into gambling is in its infancy here and internationally, compared to research efforts on alcohol and drug dependence. The research that is being undertaken is largely uncoordinated and often reinventing the wheel in each state and using different methodologies so that results cannot be easily compared.

We do not have the mechanisms in place to be sure we are making the best use of scare research funds. Serious consideration should be given to a recommendation from the Productivity Commission that appears to have sunk without trace.

The PC’s view was that a properly constituted national research facility is warranted and that it would provide an effective way to facilitate national co-operation and co-ordination in data collection and research. All jurisdictions would be involved and it would be co-funded. Its activities would be limited to information and research only – it would not have a policy role. It would operate to quality assurance principles for its own research and for the work it commissioned.

Such a body has considerable merit and would provide a valuable facility to ensure independent, coordinated and targeted research. It would ensure that policy could be based on evidence versus “gut feeling”. It would provide comprehensive data and means to measure and benchmark policy measures against outcomes. Finally it would demonstrate that we take the social and health issues associated with gambling as seriously as we do with alcohol or drug abuse.
Sentencing the problem gambler

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Abstract

Many problem gamblers commit crime to continue to gamble. The majority are white-collar criminals who steal from their employers or commit social security fraud. There are an increasing number of problem gamblers who are committing more serious crime such as armed robbery, crimes of violence against the person and break, enter & steal. The paper covers recent developments in the way in which the Criminal Justice system has been dealing with problem gamblers and considers the gulf between judicial culture and gambling culture. Problem gambling is a mental disorder that falls short of that which can be regarded as a defence. Courts have difficulty in sentencing problem gamblers. There is the question of general deterrence and whether you can deter the “mad”. However, is there any real benefit to be gained from imprisoning problem gamblers, or is it simply a reflection of social and judicial prejudices? Generally problem gambling is merely one factor to be taken into account by a court, even if it was the only real cause of the crime. Problem gamblers have therefore not traditionally been viewed as a special category of persons like drug addicts or the mentally ill. Hence, a problem gambler committing crime, in particular fraud will more than likely be sentenced to full time goal than a drug addict. Why is it that problem gamblers continue to be treated harshly by the Criminal Justice System and gambling addiction virtually dismissed as irrelevant? The paper will explore sentencing options other than full-time goal and if society recognizes that sending the problem gambler to goal as a punishment and a general deterrence to other problem gamblers is not the answer.
Introduction

The number of Problem gamblers committing crime has increased. Gambling was traditionally perceived as a male vice but there has been a significant increase in the number of women being charged with criminal offences of deception. This type of offence is labelled as “white collar” crime, fraud, stealing from your employer and social security fraud. Deception offences are committed by a higher number of female offenders than other crimes as reported by Gallagher (1996).

There is no particular age which dominates and age varies across the board. The majority of problem gamblers committing crime are first offenders. They have never been before the courts and on the face of it have lead respectable lives as discussed by Gallagher (1996 a) & (1996 b). In terms of socio-economic considerations the majority are in the lower middle class and have worthwhile employment. They have disposable income and ready access to all forms of gambling particularly the TAB and Gaming Machines.

There has also been a marked increase in the number of crimes of violence committed by problem gamblers in their desperate quest to gain money to gamble. In my practice I have seen an increase in armed robbery and handbag snatching. Whilst there is not such a marked increase as crimes of violence, housebreaking by problem gamblers has also become a popular method of obtaining money to gamble.

In the majority of cases the problem gambler will plead guilty to the criminal charges and are dealt with by a Judge or Magistrate as found in Gallagher’s research. Gallagher (1996 a) & (1996 b).

This is the dilemma confronting the judicial system, particularly first time offenders. What is the appropriate sentence and what weight if any does being diagnosed as a Problem gambler mitigate in favour of the offender? From the overview above, every case is different. There are varying and numerous subjective features involved in assessing an appropriate penalty. The legal position is that persons who commit crimes of deception must be sent to gaol.) This was the principle discussed in the case of R v Chaloner (1990), Mr Chaloner was an assistant loans manager with the Commonwealth Bank. He stole $122,260 from the bank. He was sentenced to 9 months gaol. He appealed the sentence and was placed on a good behaviour bond. It was held by Kirby J in the Chaloner case that:

“In offences of this kind, by persons in a position of trust, a custodial sentence is normally required in order to deter others, unless there are special circumstances to warrant a non-custodial sentence” (Chaloner, 1990).

This paper will examine where the issue of problem gambling should be seen as a mitigating or special factor giving the Courts’ a discretion to impose non-custodial sentences and provide the problem gambler the opportunity to rehabilitate.

I will give a brief summary of the relevant law and sentencing principles in New South Wales and then refer to case studies from my experience, which highlight the inconsistencies in sentencing the problem gambler.
Sentencing the problem gambler

In New South Wales, the punishment for crime serves a number of purposes and balances competing interests. The sentencing process reflects competing factors and policies. These principles were enunciated in the case of Veen V The Queen (1988).

1. To Punish the offender
2. To protect society
3. To deter others
4. To rehabilitate and reform the offender

In our Criminal Justice System, the law does not punish persons with mental illness or a mental handicap by emphasising the need to “deter others”. You cannot deter the mentally handicapped from committing crime. They have a special place in the sentencing scheme.

In the case of R v PSAROUDIS (1996) problem gambling as a mitigating factor, was discussed by Sperling J. At page 3 of the judgment he said:

“I give particular consideration to the appellant’s psychological condition of pathological gambling. A mental handicap short of that which would provide a defence may nonetheless be a basis for a reduced sentence. That is because less weight is to be given to general deterrence in the case of an offender with psychiatric problems, it being inappropriate that such a person should be made an example for others” The Judge continues:

“The authorities are stated in Suk-jai Crawshaw…”The principle is commonly applied in cases where the capacity to reason and evaluate have been affected by mental illness, such as schizophrenia. A gambling addiction does not to my mind, command the same significance.”

This is the law in NSW as stated in the case of Sukjai-Crawshaw (1994).

In the case of case of R v Morna Molesworth (1999), the New South Wales Court of Criminal Appeal considered the issue of pathological gambling Although the appeal was dismissed by majority in relation to the trial judge’s exercise of discretion the majority expressed approval of the principle which was enunciated in the Victorian Supreme Court in the case of R V Petrovic (1998)

“ That the fact that an offender is motivated to the commission of the crimes in question by an addiction to gambling, will no doubt, usually be a relevant, and may also be an important, consideration for a judge sentencing an offender for these crimes”.

Mrs Molesworth was charged with social security fraud involving the amount of $73,327.32. She was sentenced to 18 months in gaol to be released after serving 12 months.

The three Justices in the Molesworth case did not specifically look at the issue of whether or not pathological gambling should be afforded the same consideration as other mental illnesses.
However, it was held that gambling is a factor and an important factor, in mitigating the sentence. The Chief Justice also agreed with the dissenting judgement that the gambling addiction and the personal factors that lead to that condition are separate matters and the fact of the gambling addiction should not require the ignoring of the personal factors that lead to the condition. His Honour Justice Adams said:

“Serious as they are, the accumulation drip by drip of small sums turns into a frightening total. I share the learned Judge’s view that this was a case for full time custodial penalty, but in my respectful opinion, his Honour’s judgment did not adequately reflect the circumstances of the appellant before and whilst these offences were committed and which to some degree explain why they occurred”. Molesworth (1999) per Adams J.

This issue has been recently reviewed by the High Court in Ryan v The Queen (2001). This case reviewed the issue of a person’s prior good character and whether good character should be given little weight in the sentencing process when an offender commits a series of offences over a number of years. In Ryan’s case, although it dealt with a Priest who was a paedophile, the principles enunciated could equally be applied to problem gamblers who commit fraud over a period of time. At paragraph 126 of the judgment, Justice Kirby said:

“The appellant’s paedophilia is an explanation for his sexual attraction to young persons. It is not a defence to the criminal conduct in which he engaged. However, depending on the evidence or other material available to the sentencing judge, it might be appropriate, in sentencing such an offender, to consider the common cause of his multiple offences as that cause is relevant to evaluating the totality of his wrongdoing. Doing this might allow a court, in sentencing him, to view his actions in context by reference to a major contributing cause of his offending, if not the major cause of it.” (2001) Ryan v The Queen per Kirby J.

He went on to say:

“A conventional way of avoiding excess of punishment and of reflecting overall criminality where a number of criminal acts are seen as connected in a relevant way, is to provide that sentences imposed should be served (in whole or in part) concurrently... Where strong common elements linking criminal acts are accepted, it can sometimes be an error of principle, in determining punishment, to ignore the that fact or give undue weight to the separate acts involved.... Each views the individual offences in their context, by reference to relevant linkages. That context and those linkages are not confined to temporal ones. Depending on the evidence and the issues in a case, similar questions might arise in sentencing a person whose behaviour is affected by schizophrenia, mental retardation, established drug addiction, kleptomania, paedophilia or like contributors to multiple offending.”

Justice Kirby also added:

“It has been said that retribution requires that a judicial sentence properly reflect the moral blameworthiness of the particular offender. Where serial criminal
offences manifest a common underlying condition which is properly proved, for example one giving rise to a compulsive sexual syndrome), it would seem arguably appropriate in sentencing to take the underlying condition into account. That condition might suggest that the particular instances of criminal offending are to be viewed as connected. In such a case, depending on the evidence and the issues, it might be proper to punish the offender less severely than would be appropriate for a series of wilful completely unconnected offences.”

The principles enunciated by Justice Kirby and read in the context of the Molesworth decision, could equally apply to problem gamblers. Problem gamblers who commit crimes of dishonesty or fraud will commit multiple acts of fraud over a period of time. It is not usually confined to a one off theft. Therefore, although a number of separate crimes or thefts occur, the underlying reason or cause for the thefts is due to the pathological gambling disorder.

Hence it will be open to the Courts to treat problem gamblers with a degree of leniency, which has not been afforded to them to date. It is the behaviour of the person, which needs to be analysed when determining the appropriate punishment. At the publishing of this paper the NSW Supreme Court has not considered the issue. However, I have referred to the Ryan case in the District Court of New South Wales and Local Courts in relation to problem gamblers who have committed fraud, or crimes of deception with successful outcomes.

I believe that a pathological gamblers’ capacity to evaluate and reason is seriously affected by the gambling addiction to such an extent that they have no control over what they are doing. Problem gamblers should be afforded leniency. It is inappropriate, in all the social circumstances, to punish the problem gambler in order to deter others. It is a fallacy.

In the next section I will look at what other options are available to the sentencing Judge instead of full-time prison when sentencing the Problem gambler.

Sentencing options –alternatives to full-time prison

In New South Wales, the Crimes (Sentencing Procedure) Act 1999, the Crimes Legislation Amendment (Sentencing Act) 1999 and the Crimes (Administration of Sentences Act) 1999 were assented to in late 1999. This amalgam of Legislation effectively codifies sentencing of offenders in New South Wales.

The amalgam of Legislation re-enacts the sentencing procedure provisions in the following:

- Community Service Orders Act 1979
- Crimes Act 1900
- Criminal Procedure Act 1986
- Home Detention Act 1996
- Justices Act 1902
- Periodic Detention of Prisoners Act 1981 and
- Sentencing Act 1989

Division 2 of Part 2 of the Procedure Act deals with “Alternatives to full time detention” and deals with periodic or weekend detention and home detention.
Division 3 of Part 2 of the Procedure Act deals with “non-custodial alternatives” and deals with community service orders and good behaviour bonds.

Over the last 30 years, alternative sentencing theories have undergone rapid development within the criminal justice system across the developed world. The underlying philosophy driving this development as found by the NSW Corrective Services Research Paper (1998), is:

- The potential social benefit of community based sentencing
- Effective diversion of less serious offenders from prison
- To contain the overall spending on full-time custodial inmates
- The need to develop more flexible sentencing systems and to rehabilitate the offender.

The development of Community based alternatives to prison reflects the prison system’s failure to rehabilitate offenders and changing community attitudes which was an argument put forward by the NSW Law Reform Commission (1996).

**Home detention**

The New South Wales Home Detention Scheme commenced in NSW on 21 February 1997. The scheme is a diversion based, sentencing scheme.

The scheme is available to certain offenders convicted for an offence with total sentence of 18 months or less and ordered to serve his/her sentence by way of full-time imprisonment.

The Legislation requires that an offender be found guilty of or pleads guilty to an offence and then sentenced to a term of full-time imprisonment before the Judge or Magistrate directs that an assessment as to suitability for home detention is made.

The Home Detention Unit assesses the offender, as part of the NSW Probation and Parole Service.

Offenders must fulfil the following:

- Must not be convicted of a sexual offence or have a history of sexual offending
- Must not be convicted of domestic violence against a person they wish to reside
- Must not be convicted of offences involving commercial quantities of illicit drugs
- Must willingly consent to participating in the scheme

A suitability assessment is undertaken; the following factors are looked at when making an assessment:

- The offender’s residence must be in a designated operational area.
- Level of the offender’s drug or alcohol involvement
- Likelihood of re-offending whilst detained
- Likelihood of the offender committing domestic violence
- Work opportunities
- Physical and mental health
- Personal, family and lifestyle issues.
If an offender is placed in home detention there is random personal and telephone contact by the NSW Home Detention Unit of the Probation and Parole Service. There is also electronic monitoring by way of leg brace and bracelet verification units and drug and alcohol testing. The offender is allowed to attend work and other appointments such as medical or Centrelink interviews. However, strict written details must be recorded.

It has been held by the NSW Court Of Criminal Appeal in the case of R v Jurisic (1998) that:

“A term of imprisonment by way of home detention is substantially less onerous sentence than imprisonment within the confines of a prison.”

“The sentencing judge should implement the Act by first determining the appropriate sentence. If that sentence is less than the Statutory maximum in the Act then the judge must exercise discretion to refer. On a favourable report the final discretion to make the order must be exercised”.

In the writer’s view, home detention could be an effective method of punishing Problem gamblers. It would allow them to remain in the Community and be gainfully employed and to continue with counselling and rehabilitation. There would also be a realistic opportunity to repay stolen funds.

**Suspended Sentence**

Section 12 of the Sentencing Procedure Act 1999 reintroduced the “suspended sentence” as a valid sentencing option. The overall effect of a suspended sentence as opposed to a good behaviour bond is that it has more of an element of deterrence. It is, in theory, a more serious sentencing option than a good behaviour bond.

Suspended sentences involve the court imposing a period of full-time imprisonment and then suspending its operation and releasing the offender. The offender is released with or without conditions. The conditions can include supervision by the Probation and Parole Service of NSW, the offender undertake or continue any counselling or treatment and to be of good behaviour for a period of time. Suspended sentences apply to sentences that do not exceed 2 years.

The Suspended sentence is designed to reflect the seriousness of the crime and the consequences of re-offending. If an offender breaches the conditions of the suspended sentence then they will more likely than not required to reappear before the sentencing officer and ordered to serve the sentence in prison as discussed by Haesler (2000).

**Weekend or Periodic Detention.**

A court can impose a period of imprisonment but order that it be served by way of Periodic Detention or Weekend Detention. The offender must be assessed as suitable to undertake this type of detention. The court must also be satisfied that there are places available for the offender to serve his/her sentence. An offender must report to the designated periodic detention centre on Friday afternoons where they remain confined in the prison until Sunday. There are also detention centres which are available as a mid week venue. This is a popular sentencing option as it allows
an offender to remain in the community for the majority of the sentence. This allows offenders to continue counselling or treatment programs.

**Community Service Order**
Where a person has committed an offence punishable by imprisonment, the court may, instead of sentencing the offender to imprisonment, make an order requiring the offender to perform community service work. The Court can make the Community Service Order subject to the following considerations:

- The consent of the offender must be obtained
- The court must be advised by the Probation and Parole Service that suitable arrangements for Community service work can be made in the offender’s local area and
- The offender must be assessed as suitable to perform the work. This takes into account the offender’s health, age and personal factors.

The type of work undertaken by an offender undertaking Community service work can include garden and household maintenance for pensioners, maintaining school grounds, bush regeneration projects and driving for Meals on Wheels. This list is not exhaustive but highlights the nature and spirit of Community Service work.

As part of the Community service Order the Court can also order that the offender go to an attendance centre and participate in development programs. This type of program was considered as an effective sentencing option by the NSW Law Reform Commission (1996).

**Good Behaviour Bond**
Section 9 of the Procedure Act sets out the general power to impose a bond. The length of the good behaviour bond cannot exceed 5 years. Certain conditions can be imposed by the Court including supervision by the Probation and Parole Service, continuing counselling and treatment, undertaking personal development courses. This is the most common sentencing option used by the Local Court, particularly for crimes of deception as found by Gallagher (1996 a), in her research.

Section 10 of the Procedure Act allows the Court to dismiss the charge without proceeding to a conviction. If a person pleads guilty to a charge in certain cases, the sentencing officer can still dismiss the charge without recording a conviction. Particularly where the offender has no prior convictions it is an appropriate option. The offender can keep a clean slate, and not have the stigma of a criminal conviction recorded against the offender’s name.

Section 11 of the Procedure Act deals with a “temporary bond”. A Court can adjourn proceedings and grant bail for a period of up to 12 months, to assess the offender’s capacity to rehabilitate and allow the offender to demonstrate that rehabilitation is genuine. This particular option has been successfully used in the Licensing Court of NSW when dealing with offenders who continually breach exclusion orders from the Star City Casino.

This particular section allows the offender to continue with counselling and other treatment, which is assisting with rehabilitation. If the offender responds positively to the counselling then the section 11 bond will be converted to a section 9 or 10 good behaviour bond.
In summary, there are many effective options available to a sentencing officer, other than full-time imprisonment.

In the Local Courts use of the good behaviour bond and community service are popular options.

In the District Court of NSW, full-time imprisonment is the most common outcome for offenders who commit crimes of deception. It is followed by Community Service orders with good behaviour bonds used infrequently. This was a trend that Gallagher discussed (1996 b).

**Case Studies**

**Vanessa**

Vanessa was a middle-aged lady addicted to the poker machines. She held a responsible job with an accounting firm. Her wages were spent on gambling and her efforts to hide this from her husband were becoming difficult. She was in debt; she had pawned her jewellery and had borrowed money from a loan shark. She was desperate. She went into the local credit union and committed an “armed” robbery. She used her vacuum cleaner nozzle as the weapon. Vanessa went immediately to a local club and gambled the money. She stole over $20,000.00 Her exploit was captured on security video and she was ultimately charged and convicted. She was sentenced to 2 years weekend detention. Her problem gambling was diagnosed and her excellent progress with counselling assisted in keeping her out of full-time prison. The sentencing court took the view that notwithstanding the seriousness of the crime, the offender’s motivation to commit such an act was due to her addiction to gaming machines and alcohol. The Judge was of the view that her actions in committing the crime were the actions of a desperate and irrational person and consistent with her pathological gambling disorder.

**Patricia**

Patricia was a young woman, happily married and with a supportive family background. She was passionate about her chosen sport of netball and loved to take her pet dog for walks. She held an excellent position as typist, receptionist with a suburban business. What is so extraordinary about her case is that she was so ordinary. She had the hopes and dreams of many young women in her position.

Patricia stole $832,000.00 from her employer. All of the money was gambled at the local club over a period of 16 months. She was a pathological gambler. She gambled at lunchtime, during work when she was supposed to be banking the takings and after work. Her life became more secretive and deceptive.

Overwhelmed by the guilt of what she had been doing, Patricia confessed to her parents and then her husband. She was charged and convicted. She was sentenced to 3 years in gaol, with a non-parole period of 15 months. She had no prior convictions. The only reason that Patricia was sentenced to imprisonment was due to the large amount of money that had been taken. The judge had no choice but to punish Patricia so as to deter others from stealing such large amounts of money. In this particular case the business was insured against employee fraud and a large insurance company paid out the claim.
Morna

Morna’s case is reported in the NSW Law Reports. Morna was my client. She was 70 years of age and was charged with defrauding Social Security. She obtained $73,000.00 in benefits from Centrelink to which she was not entitled. She gambled at the local club and cash bingo.

She lived this clandestine life for many years. Consumed with guilt she confessed to a local Reverend. The authorities were notified and Morna was subsequently charged and convicted. She had no prior convictions and was sentenced to 18 months in prison with a non-parole period of 12 months. At the time she was dealt with by the legal system, Morna ran a soup kitchen at the local church for the poor and elderly, youth group for street kids and made toys for poor children.

She served her time, was released from prison and now has to repay Centrelink the $73,000.00 from her aged pension.

The case was subsequently heard on appeal in the Court of Criminal appeal. The appeal was unsuccessful.

Binh

Binh was a Vietnamese refugee who came to Australia in the late 1970’s via a smuggler. He was afforded refugee status and he adopted his new Country with pride. He became addicted to poker machines. Out of desperation, he stole equipment from the schools where he worked as a cleaner. The value of the property was over $50,000. He confessed and was charged and convicted. He was so ashamed of his actions. He genuinely believed that he had betrayed the country that had given him refuge. He had attempted suicide. He was at risk of being sentenced to full-time imprisonment. Due to his genuine remorse, his progress in counselling and his acknowledgment of his guilt he was ordered to perform Community Service. The Magistrate took into account Binh’s gambling addiction and that he had responded positively to counselling. Some of the property was recovered. I understand that as a result of his enthusiasm for performing the community service, he was offered a full time paid job.

Conclusion

In conclusion, I believe full-time imprisonment is not the most effective way to deal with problem gamblers who commit crime. There are no counselling services available in the prison system. Therefore, on release, the problem still remains. There is little opportunity for any of the stolen funds to be repaid if an offender is sent to prison.

In my opinion, whatever label is placed on pathological or problem gambling, it is my view that a Problem gambler’s capacity to reason and evaluate are affected by the condition. Therefore, the Problem Gambler needs the help and assistance of the Judicial System in order to rehabilitate and overcome his / her addiction.

In light of the Ryan decision and the findings of the Productivity Commission (1999), Problem gamblers may now be in a position to argue that leniency should be afforded to them. It is also open to argue that to punish a problem gambler by sending them to prison to deter other problem gamblers is no longer a valid argument.

There are a number of effective alternatives available to the sentencing officer, particularly when dealing with the Problem gambler who commits crimes of deception. As legal practitioners and
professional counsellors, we need to educate and inform the wider community and those who have the difficult task of sentencing offenders, about the insidious disorder that manifests as problem gambling.
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Gambling expansion in Canada: Shaping the public health agenda

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Abstract

A dramatic increase in legalized gambling occurred in Canada in the 1990s, primarily because of governments’ need to increase revenue without additional taxation. As a result, major public health issues have emerged including gambling addiction, family dysfunction and gambling by youth. This paper takes a public health perspective, examining the health, social and economic costs and benefits of gambling. Only recently has the attention been focused on the health and social policy agenda in Canada. The paper concludes with action steps outlined by the Canadian Public Health Association to deal with the issue of gambling in Canada.

Canada experienced a dramatic increase in legalized gambling in the 1990s. Government-owned gambling expanded dramatically during the 1990’s associated with public policy intended to increase government revenue without additional taxation. There was a dramatic growth in the numbers of casinos, slot machines and video lottery terminals across Canada.

This paper examines gambling from a public health perspective. The major public health issues include gambling addiction, family dysfunction and gambling by youth. Debates have emerged about the health, social and economic costs and benefits of gambling. Stakeholder and social policy groups have expressed concern about the impact of expanded gambling on the quality of life of individuals, families and communities. Epidemiological studies show that the prevalence of gambling in the general adult population is low but gradually increasing. Of particular concern is the high though steady prevalence of gambling among youth. New technologies have been linked to gambling-related problems such as addiction to gambling by video lottery terminals. Gambling by means of the Internet represents another emerging issue.

Despite this, Canadians recognize gambling as an important source of revenue and prefer increased gambling to higher taxes. However, increased services for problem gamblers and public consultations prior to the introduction of new games is also desired.

Public health has a tradition of addressing emerging and complex health matters that affect the population as well as specific subgroups. The value of a public health perspective is that it examines the broad impacts rather than focusing solely on problem and pathological gambling.
behavior in individuals. It takes into consideration the wider health, social and economic costs and benefits, and gives priority to the needs of vulnerable people.

Legalized gambling in Canada exists under the authority of the federal Criminal Code of Canada with responsibility for gambling operations delegated to the provinces and territories. Only recently has the attention been focused on the health and social policy agenda. In the early 1990s provincial governments began to fund services for people with gambling problems. The public ownership model places provincial governments in the position of regulator, owner-operator, and service provider for gambling-related problems. These multiple roles and responsibilities have raised some concerns among stakeholder and social policy groups.

The Canadian Public Health Association (CPHA) has been engaged in this issue since the early 1990s. In 1993, the CPHA passed a resolution at its annual general meeting calling for a national assessment of the health impacts of regulated gambling. In 2000, the CPHA adopted the Position Paper entitled Gambling Expansion as an Emerging Health Issue.

The CPHA action steps include:
1. Adopting public health goals for gambling:
   a. Promoting informed and balanced attitudes, behaviours and policies towards gambling and gamblers;
   b. Preventing gambling-related problems in individuals at risk of gambling addiction; and
   c. Protecting vulnerable groups from gambling related harm.
2. Endorsing the position that expansion of gambling in Canada has significant health and public policy impacts;
3. Convening a public health think tank on gambling; and
4. Advocating for a national public policy review of gambling expansion that analyses the effectiveness of our public ownership and accountability framework, and studies the Canada-wide prevalence of gambling problems.

In closing, public and social policy challenges for gambling in Canada include: fostering a broad research agenda, monitoring gambling advertising, evaluating the impact on quality of life, adopting a harm reduction perspective, and balancing the public interest through a national policy review.
References


Adolescent gambling problems: Public health intervention using the Internet

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Abstract

As the increased legalization of various forms of gambling in Canada continues, the impact of gambling on the lives of youth is increasingly becoming an issue. This presentation highlights the issue of gambling among youth and takes a public health approach to addressing the issue using prevention, harm reduction and health promotion principles. At the University of Toronto the TeenNet project uses the Internet to engage youth in health promotion. A youth website, YouthBet.net, will be launched in Spring 2002 to address the issue of youth gambling. Its effectiveness will be evaluated with youth across the province of Ontario.

Youth broadly participate in gambling and demonstrate significantly higher rates of problem gambling than adults. A public health approach to youth and gambling guided by prevention, harm reduction and health promotion principles offers significant opportunities to address youth gambling.

Legalization of various forms of gambling in Canada is a trend that is expected to continue. At the same time the increased availability of gambling, especially electronic gaming, will likely result in an overall increase in the prevalence of gambling problems. Of particular concern to policy makers and health professionals alike is the potential impact of gambling on youth’s lives. While technology has made gambling more available, it also offers compelling possibilities for addressing gambling problems. In particular, the Internet provides innovative ways of engaging youth, allowing opportunities to assess and address their needs, and enabling them to offer each other support.

A health promotion approach addresses both the positives and the negative dimensions associated with youth gambling. In developing the website we believe there are some perceived positives. Youth can learn competencies in the areas of numeracy, literacy, and decision making, as well as coping strategies for disappointment, loss and winning.
In addition, we believe there is an opportunity to promote self-efficacy and informed choice around leisure and lifestyle decisions and health behaviours.

Since 1995, the TeenNet project (www.teennetproject.org), based in the Department of Public Health Sciences, University of Toronto, has focused its research on using technology for health promotion with youth. TeenNet takes a “youth in action” approach that involves young people from diverse backgrounds. One of the unique features of TeenNet is its ability to engage youth in all phases of the project through an action research model. Throughout the process, we are committed to a range of partnerships including those with community organizations and youth.

In 2000, the Ontario Ministry of Health and Long-Term Care provided TeenNet with multi-year funding to investigate the potential for technology to address youth gambling. TeenNet’s youth and gambling project centres on the development of a multimedia website, with interactive technology components, to address youth gambling problems from a prevention, harm reduction and health promotion perspective. In particular this project addresses the issue of youth gambling within TeenNet’s existing youth-designed web-environment, CyberIsle. Outcomes of the project include an interactive multimedia youth and gambling website and evaluation on the effectiveness of prevention and harm reduction interventions.

The website, YouthBet.net is scheduled to be launched for Spring 2002. It features a neighbourhood scene representing the areas where gambling occurs in the lives of youth. Environments featured on the site include: a schoolyard, a back alley, a corner store, a casino, a library, and a community centre. A number of interactive public health interventions have been developed. These include: games on money management, time management, and decision balance; the SOGS-RA screening tool; a risk perception tool; and information on odds, randomness and probability. In addition to the interventions, there is a range of material including information on internet gambling, signs of gambling problems, definitions of gambling, stories about winning and losing, information on the gambling industry, links to other gambling organizations, and links to help resources to name a few.

Goals from this project include: promoting informed, balanced attitudes and behaviours about youth gambling; preventing youth gambling related problems; and protecting vulnerable and at-risk youth.

The next phase of the project includes promotion of the website and evaluating the effectiveness of the website with youth.
References


EGM gambling: Gender and ethnic determinants of an entrenched Australian phenomenon

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Abstract
Electronic gaming machine (EGM) gambling has recently become part of Australian culture, which has long been tolerant of other forms of gambling. The aim of this study was to examine ethnicity and gender issues with problem EGM gambling. Three hundred and thirty-five participants (M=123, F=209; three participants did not identify their sex) with a mean age of 44.9 years were surveyed in gaming venues within Metropolitan Melbourne. Dividing the sample by gender, the female group had a greater representation of Australian-born (74%) compared to the male group (64%) and were also older (47% were aged 41-60 years) than the male group (48% of males were aged 19-40 years) of the sample. The results of chi square tests of independence showed a significant relationship between gender and pathological EGM gambling, with males more likely to be pathological EGM gamblers than females (p ≤ .05). There was a significant relationship between religion and problem EGM gambling with respondents belonging to the Greek Orthodox faith more likely to be problem EGM gamblers than those following other religions. Implications of this study suggest that different gambling media suit different cultures and that other issues pertaining to cultural aspects of gambling need to be explored in greater depth.

Introduction
In 1992, the Australian State of Victoria legalised gambling. Electronic gaming machines (EGMs, also known as “poker machines”) were introduced and the first Victorian casino opened. Since then, there has been an increase of 258% in the level of household spending on gambling, with six million dollars alone, per day, lost through poker machine gambling (Dunn, 2001, August 9; Mitchell & Dargan, 2001, August 7). This massive expenditure and subsequent losses suggest that gambling is a major problem in Victoria. EGM gambling has become such an entrenched phenomenon, that Victoria has become the gambling state of Australia, with poker machines
being the most popular form of gambling (Dunn, 2001, August 8; Mitchell & Dargan, 2001, August 7).

Although gambling in Australia has “traditionally been a male pursuit,” (Buchanan, 1994, p.15), the introduction of poker machines and increased access to gambling activities has resulted in gender-specific gambling changes, with an increased participation of female gambling. Although there are gender differences in preferred forms of gambling, (Brown & Coventry, 1997; Delfabbro & Winefield, 1996), little is known about women’s gambling practices. Hence, since the late 1990’s, there has been a shift in the focus of gambling research, to the role of gender and women’s gambling.

Brown and Coventry’s (1997) study aimed to examine women’s gambling behaviour by conducting a widely publicised phone-in of 6-hour duration, over two consecutive days. Their research was designed to accommodate a maximum participation of 200 self-identified problem gamblers, who were expected to complete several questionnaires on demographic data, gambling concerns and practices and gaming venue attraction. Their final sample consisted of 102 self-selected female problem gamblers. Brown and Coventry (1997) found poker machine gambling to be the preferred form of gambling for women. Their results showed an over-representation of rural women in their sample; two thirds were aged between 40 and 59 years; 78% of the sample were Australian-born; (8 countries were represented) 20 % were tertiary-educated; 40% had partners; 29% received a social security pension and 59% received some income from employment.

Hing and Breen’s study (2001) examined female gambling behaviour, by comparing women’s gambling participation, poker machine activity and problem gambling, against a male group, selected from the membership of 6 large Sydney clubs. They used the South Oaks Gambling Screen (Lesieur & Blume, 1987) to identify problem gamblers. They conducted a telephone survey of 3000 (M=1743, F= 1257) randomly selected participants from a larger pool of 16,642 households from the membership lists of 6 major clubs within Sydney, Australia. Of these 3000 respondents, the results were based on data taken from 2430 respondents who had gambled on one of the 13 forms of gambling examined in the study. Their results showed that the female club members were more likely to prefer lotteries, bingo and gaming machines than males. Hing and Breen (2001) found a significant gender difference in the frequency of gambling participation for all 13 gambling types with bingo being a predominantly female pursuit, whereas TAB and on-course betting, casino table games and hotel EGMs were predominantly male. They also found significant gender differences with respect to time and money spent on gaming machine play. Females were more likely to exhibit behaviour patterns, which extended their playing time, compared to the males. There was no significant gender difference in the prevalence of problem gambling, based on a SOGS score of 5 or more.

Tavares, Zilberman, Beites and Gentil (2001) examined the demographics and gambling behaviour of 77 pathological gamblers (M=38, aged 42.3 ± 9.5 years; F=39, aged 44.7 ± 9.5 years) admitted to an outpatient treatment program, and who had no past history of treatment for problem gambling. They used the SOGS and DSM IV to identify pathological gamblers. The respondents were recruited through advertisements and expected to answer two questionnaires, one on demographic information, the other associated with gambling behaviour. Their demographic results showed 89% of the females were white, 67% of the female group were Catholic, 59% without a partner, and most had secondary education. They found no significant gender differences in age, ethnicity, religion, or education. They found a significant difference in marital status and employment, with the females more likely to be single compared to the males, and also less likely to be regularly employed.
Tavares et al. examined gambling behaviour and found the males began gambling at a younger age than the females. However, there were no differences in preferred forms, with both groups preferring bingo, although the males participated in a wider variety of games. In summary, they found problem gambling for females began at a later age than for males, the gambling activity increase was faster for females and that the females were more likely to be single compared to the males.

The aims of this study were firstly, to examine EGM gambling behaviour and secondly, to examine ethnicity and gender issues with problem EGM gambling behaviour. It was hypothesized that there would be a significant relationship between the demographic variables gender, age, country of birth, marital status, religion, education, occupation, and income, with pathological EGM gambling.

Method

Participants

Three hundred and thirty-five EGM gamblers were recruited from various gaming venues within Metropolitan Melbourne. The sample included 123 males and 209 females (three participants did not identify their sex) with a mean age of 44.9 years (median age 45 years). The response rate was 44.6%. Thirty-four different countries of birth were represented in the sample.

Materials

The South Oaks Gambling Screen (SOGS) was used to screen for pathological gambling. It contains 16 questions, four of which are excluded from the scoring procedure. The twelve questions which are scored, yield a maximum score of 20; a score of 5 or more being the criterion for classification of probable pathological gambler. The instrument has good reliability as Lesieur and Blume (1987) reported a correlation of .71 (df = 110, p < .001) following a test retest interval of 30 days. They reported a Cronbach’s alpha coefficient of .97 (p < .001) indicating high internal consistency. The validity of the SOGS was established by a correlational study using scores from the Diagnostic and Statistical Manual of Mental Disorders Third Edition Revised (DSM-III-R) with scores from the SOGS. Lesieur and Blume (1987) reported a very high correlation of $r = .94$ (df = 747, p < .001) establishing the instrument’s construct validity.

A demographic questionnaire was used to examine gender and ethnicity. The variables “country of birth” and “religion” were used as proxies to assist in identifying ethnic background. Other variables such as age, marital status, source of income, education level and occupation were included on the demographic questionnaire.

A questionnaire the “Poker Machine Gambling Screen” was developed to examine EGM gambling behaviour. It contained 29 questions (including qualitative data) pertaining to EGM gambling behaviour, the use of autobanks, cognitions, and EGM characteristics. Interspersed were 6 questions from the SOGS, to check for response consistency.

Procedure

Approval for the study was obtained from the Monash University Standing Committee on Ethics in Research on Humans. Forty-six gaming venues were unsuccessfully approached for their support with this study. Representatives from two gaming consortiums were then approached, for
permission to enter gaming premises to survey their patrons. The first consortium successfully sought permission to survey patrons in one gaming venue in the eastern and southern suburbs of Metropolitan Melbourne, two venues in the western suburbs and two venues in central Melbourne. Gamblers were approached whilst playing EGMs if they were seated at the end of a row or next to a vacant machine. Since many gamblers would not stop playing to complete the questionnaire, the researcher asked the questions verbally, where appropriate.

The second consortium identified specific parameters in which recruitment could take place. Patrons were approached if they were wearing the consortium’s logo indicating they were a guest, or in the possession of a gambling money tumbler. These patrons completed the questionnaires whilst the researcher waited for their return.

Prior to survey completion, volunteers were informed of the contents of a plain language statement, providing details of the study. They were then asked to complete the demographic questionnaire, the SOGS and the Poker Machine Gambling Screen. The data from the demographic questionnaire, Poker Machine Gambling Screen and SOGS was analysed using SPSS for Windows 6.0 (Norusis, 1993).

**Results**

The data were examined for incorrect entries and normality. An alpha level of .05 was set for all tests.

**Characteristics of EGM gambling behaviour**

Thirty-six percent of the sample gamble on poker machines twice a week or more often. Twenty percent of gamblers spend more than $50 each visit.

Forty percent use an autobank at some point during their EGM gambling session. Eighteen percent leave their autobank cards at home, to stop themselves from drawing more money when they go to play the “pokies”.

Forty-two percent of the sample prefers to attend the same venue when they participate in EGM gambling. Forty-three percent have a favourite game. Thirty-seven percent play the same machine if it is available. Sixty percent reserve their machine if they need to leave it for a short time. Thirty-six percent go alone to the “pokies”.

**Table 1. Demographic Characteristics of Participants (N = 335)**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>% of Females (n=209)</th>
<th>% of Males (n=123)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19-40</td>
<td>35.4</td>
<td>48.4</td>
</tr>
<tr>
<td>41-60</td>
<td>47.6</td>
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<tr>
<td>61-80</td>
<td>15.5</td>
<td>11.4</td>
</tr>
<tr>
<td>80+</td>
<td>1.5</td>
<td>0</td>
</tr>
<tr>
<td>Country of birth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>74.5</td>
<td>64.2</td>
</tr>
<tr>
<td>Other English-speaking countries</td>
<td>11.1</td>
<td>11.4</td>
</tr>
<tr>
<td>Other</td>
<td>14.4</td>
<td>24.4</td>
</tr>
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</table>

*(Table 1 continues)*
<table>
<thead>
<tr>
<th>Characteristics</th>
<th>% of Females (n=209)</th>
<th>% of Males (n=123)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Couples</td>
<td>50.2</td>
<td>47.2</td>
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<tr>
<td>Single</td>
<td>22.5</td>
<td>42.3</td>
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<tr>
<td>Divorced/Separated/Widowed</td>
<td>27.3</td>
<td>10.5</td>
</tr>
<tr>
<td><strong>Religion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protestant</td>
<td>30.4</td>
<td>26.4</td>
</tr>
<tr>
<td>Catholic</td>
<td>35.3</td>
<td>28.1</td>
</tr>
<tr>
<td>Greek Orthodox</td>
<td>4.3</td>
<td>5.8</td>
</tr>
<tr>
<td>Nil</td>
<td>20.8</td>
<td>28.1</td>
</tr>
<tr>
<td>Other</td>
<td>9.2</td>
<td>11.6</td>
</tr>
<tr>
<td><strong>Education</strong></td>
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<td></td>
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<tr>
<td>Did not complete secondary education</td>
<td>57.7</td>
<td>38.3</td>
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<tr>
<td>Completed secondary education</td>
<td>26.4</td>
<td>40.0</td>
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<tr>
<td>Completed tertiary education</td>
<td>13.9</td>
<td>14.2</td>
</tr>
<tr>
<td>Student</td>
<td>1.9</td>
<td>7.5</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professionals and managers</td>
<td>17.8</td>
<td>19.1</td>
</tr>
<tr>
<td>Associate professionals</td>
<td>17.8</td>
<td>19.1</td>
</tr>
<tr>
<td>Tradespersons</td>
<td>6.6</td>
<td>21.8</td>
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<tr>
<td>Clerk</td>
<td>24.9</td>
<td>17.3</td>
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<tr>
<td>Labourer</td>
<td>7.6</td>
<td>16.4</td>
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<tr>
<td>Home duties</td>
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<td>6.4</td>
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<tr>
<td><strong>Income</strong></td>
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<td></td>
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<tr>
<td>Employment</td>
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<td>78.9</td>
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<tr>
<td>Job Search</td>
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<tr>
<td>Family</td>
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<td>3.3</td>
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<tr>
<td>Pension</td>
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<td>9.8</td>
</tr>
<tr>
<td>Other</td>
<td>3.8</td>
<td>3.3</td>
</tr>
</tbody>
</table>

**Note.** The female gamblers are older than the male group, as the proportion of females in the 41-60 year age group is almost the same as the 19-40 year male group. There are a higher percentage of males born outside of Australia and other English-speaking countries, compared to the female group. The percentage of single males is almost double to the single female group. In contrast, the percentage of females who were in the group which included divorced, separated and widowed is almost triple the percentage of the male group. Seventy-five percent of females are employed, of which there is a high proportion of professionals. Females don’t have enough education for their occupation. There is a larger proportion of males on Job Search allowance, than females. However, there is a larger proportion of females on a pension, compared to the male group.

Sixty participants (18.9 %) of the total sample (N=331) had a SOGS score of 5 or more and were classified as pathological EGM gamblers. Twenty-two participants (6.6%) of the total sample (N=331) had a SOGS score of 10 or more.
### Table 2. Demographic Characteristics of Probable Pathological EGM Gamblers (SOGS ≥ 5)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency</th>
<th>% of n (n=60)</th>
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<tbody>
<tr>
<td><strong>Gender</strong></td>
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<td></td>
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<tr>
<td>Male</td>
<td>28</td>
<td>46.7</td>
</tr>
<tr>
<td>Female</td>
<td>30</td>
<td>50.0</td>
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<tr>
<td>Missing values</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Age in years</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19-39</td>
<td>29</td>
<td>48.3</td>
</tr>
<tr>
<td>40-59</td>
<td>28</td>
<td>46.7</td>
</tr>
<tr>
<td>60+</td>
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<td>3.3</td>
</tr>
<tr>
<td>Missing value</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td><strong>Country of birth</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>40</td>
<td>66.7</td>
</tr>
<tr>
<td>English-speaking background</td>
<td>5</td>
<td>8.3</td>
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<tr>
<td>Asia</td>
<td>7</td>
<td>11.7</td>
</tr>
<tr>
<td>Europe</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>Middle East</td>
<td>4</td>
<td>6.7</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>1.7</td>
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<tr>
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<td>1.7</td>
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<tr>
<td><strong>Marital status</strong></td>
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<td></td>
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<tr>
<td>Married /de facto</td>
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<tr>
<td>Single</td>
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<td>48.3</td>
</tr>
<tr>
<td>Divorced / separated / widowed</td>
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<td>15.0</td>
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<tr>
<td>Missing value</td>
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<td>1.7</td>
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<tr>
<td><strong>Religion</strong></td>
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<td></td>
</tr>
<tr>
<td>Protestant</td>
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<td>20.0</td>
</tr>
<tr>
<td>Catholic</td>
<td>19</td>
<td>31.7</td>
</tr>
<tr>
<td>Greek Orthodox</td>
<td>7</td>
<td>11.7</td>
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<tr>
<td>Nil</td>
<td>13</td>
<td>21.7</td>
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<tr>
<td>Other</td>
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<td>11.7</td>
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<tr>
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<tr>
<td><strong>Education</strong></td>
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<tr>
<td>Did not complete secondary education</td>
<td>25</td>
<td>41.7</td>
</tr>
<tr>
<td>Completed secondary education / apprentice</td>
<td>24</td>
<td>40.0</td>
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<tr>
<td>Completed tertiary</td>
<td>7</td>
<td>11.7</td>
</tr>
<tr>
<td>Student</td>
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<td>3.3</td>
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<tr>
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<td>3.3</td>
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</table>

(Table 2 continues)
Table 2 continued

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency</th>
<th>% of n (n=60)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professionals / managers</td>
<td>11</td>
<td>18.3</td>
</tr>
<tr>
<td>Associate professionals</td>
<td>12</td>
<td>20.0</td>
</tr>
<tr>
<td>Tradesperson</td>
<td>6</td>
<td>10.0</td>
</tr>
<tr>
<td>Intermediate / elementary clerk</td>
<td>14</td>
<td>23.3</td>
</tr>
<tr>
<td>Production / Labourer</td>
<td>6</td>
<td>10.0</td>
</tr>
<tr>
<td>Home duties</td>
<td>8</td>
<td>13.3</td>
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<tr>
<td>Missing values</td>
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<td>5.0</td>
</tr>
<tr>
<td>Income</td>
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<td></td>
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<tr>
<td>Employment</td>
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<td>73.3</td>
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<td>Social security</td>
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<td>20.0</td>
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<tr>
<td>Other</td>
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<td>5.0</td>
</tr>
<tr>
<td>Missing value</td>
<td>1</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Note. The percentage of probable pathological EGM gamblers was almost the same for both sexes. The age of pathological gamblers is almost the same for both the younger and middle-aged groups. There is an age-drop off from the group 60+ years. Two thirds of the group are Australian-born and almost half of the problem EGM gamblers are single. Majority of pathological EGM gamblers are Catholic. The percentage of pathological EGM gamblers who did and did not complete secondary education is very similar. Thirty-eight percent are professionals and 13% do not work. Twenty percent of the pathological EGM gamblers are dependent on social security for their income.

Table 3. Relationships Between the Demographic Variables and Pathological EGM Gambling

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (males)</td>
<td>332</td>
<td>3.80</td>
<td>1</td>
<td>.05*</td>
</tr>
<tr>
<td>Age (under 45 years)</td>
<td>330</td>
<td>5.00</td>
<td>1</td>
<td>.02*</td>
</tr>
<tr>
<td>Country of birth</td>
<td>333</td>
<td>1.67</td>
<td>2</td>
<td>.43</td>
</tr>
<tr>
<td>Marital status (single)</td>
<td>334</td>
<td>13.08</td>
<td>2</td>
<td>.00*</td>
</tr>
<tr>
<td>Religion (Greek Orthodox)</td>
<td>330</td>
<td>9.51</td>
<td>4</td>
<td>.04*</td>
</tr>
<tr>
<td>Education level</td>
<td>331</td>
<td>3.46</td>
<td>3</td>
<td>.32</td>
</tr>
<tr>
<td>Occupation</td>
<td>310</td>
<td>1.67</td>
<td>5</td>
<td>.89</td>
</tr>
<tr>
<td>Income</td>
<td>331</td>
<td>.87</td>
<td>1</td>
<td>.35</td>
</tr>
</tbody>
</table>

Note. *p ≤ .05. The pathological EGM gambler is likely to be male, under the age of 45 years, single and of the Greek Orthodox faith.

Discussion

The results of this study showed no support for the hypothesis that there would be a significant relationship between the demographic variables country of birth, education, occupation and income with pathological EGM gambling. The hypothesis that there would be a significant relationship between the demographic variables gender, age, marital status and religion with pathological EGM gambling was supported.

Although there was no support for the hypothesis that there would be a significant relationship between country of birth and pathological EGM gambling, the findings showed EGM gambling to be predominantly an Australian pursuit since two thirds of the sample in this study were Australian-born (see Table 2). However, this finding partially supports the results of Brown and
Coventry (1997) who reported 78% of their sample to be Australian-born and of which EGM gambling was the preferred form of gambling. Brown and Coventry (1997) only reported frequencies and did not report results of statistical analyses. To suggest EGM gambling is an Australian pursuit must be made with caution as Brown and Coventry’s (1997) sample was biased by gender, as it excluded males; was small in size and included participants through self-selection, not through psychometric screening or statistical analyses. Neither Hing and Breen (2001) nor Tavares, et al (2001) reported on country of birth.

The lack of a significant relationship between education and pathological EGM gambling supports the findings of Tavares, et al. (2001) who also found no relationship between pathological gambling and education. However, the similar results should be viewed with caution as the sample of Tavares, et al. (2000) was much smaller (N=77), compared to the sample in this study. Their sample was also biased, as it included a clinical sample of pathological gamblers, excluding social gamblers. Although they reported that majority of their sample preferred to gamble on bingo, they failed to describe any limitations of access and availability of other forms of gambling activities in Brazil, where their study was carried out.

Both the Hing and Breen (2001) study, and the study of Tavares, et al. (2001) did not report on the relationship between pathological gambling and occupation. Thus, to comment on the lack of relationship between pathological EGM gambling and occupation, as found in this study, would be premature as further research is required.

The finding of this study which showed no gender difference between pathological EGM gambling and income does not support the findings of Tavares, et al. (2001) who found women were less likely to be regularly employed, than men. The different findings for both studies could be explained not only by the different samples, but also by the differences in the preferred forms of gambling. The sample of Tavares, et al. (2001) preferred to gamble on bingo compared to the sample in this study who were EGM gamblers. Tavares et al. (2001) did not elaborate on what different forms of gambling were available to their participants. Hence it is not known whether their sample had access to EGM gambling.

The results of this study reported a significant relationship between gender, age, marital status and religion with pathological EGM gambling, where males were more likely to be pathological EGM gamblers, under the age of 45 years, single and of the Greek Orthodox faith. These findings differ to the findings of other studies. Brown and Coventry (1997) reported EGM gambling as the preferred form of gambling for their sample of self-identified problem gamblers. They also reported two thirds of their sample to be aged between 40 and 59 years, which was a higher proportion compared to this study which reported approximately 47% (see Table 2). This difference could have occurred due to Brown and Coventry’s (1997) sample bias. Their sample excluded males and included participants through self-identification and selection rather than identification through psychometric testing. Brown and Coventry (1997) also did not report any results of statistical analyses. They only reported frequencies and thus a comparison of results should only be made very cautiously.

The findings of this study which showed EGM gambling to be a predominantly female pursuit differs from the findings of Hing and Breen (2001). They found hotel EGMs a predominantly male pursuit. This difference could be explained by the difference in venue access for volunteer recruitment. Participants for this study were recruited from two clubs, and four hotels, whereas Hing and Breen (2001) recruited only from clubs, excluding hotels. Hence, the bias in the type of venue could possibly explain the different results.

The significant relationship between gender, age, marital status and religion with pathological EGM gambling differs to the findings of Tavares et al. (2001) who found no significant gender difference in age, ethnicity, and religion. The different findings of this study compared with the results of Tavares, et al. (2001) could be explained by a comparison of the samples in each study and the preferred forms of gambling. The sample as described in the study of Tavares, et al. (2001) excluded social gamblers and involved a very small, clinical sample of pathological gamblers who had never had any prior treatment. In contrast, the sample in this study was more than four times the sample size of Tavares, et al. (2001) and it is not known whether any of those classified as pathological gamblers had been in any treatment program. The different findings could also be explained by a preference for different forms of gambling. The present study focused on EGM gamblers whereas, the sample in the study of Tavares, et al. (2001) preferred to gamble on bingo. Tavares, et al. (2001) did not elaborate on what forms of gambling are available and how accessible gambling is, to the Brazilian population. A comparison of both samples must be made with caution, as the participants in this study had no limitations to any gambling forms or accessibility, whereas Tavares, et al. (2001) did not discuss the limitations within Brazil, if any.

The results of this study, which showed a significant relationship between pathological EGM gambling and the Greek Orthodox faith did not support the findings of Tevares, et al. (2001) who found no relationship between religion and pathological gambling. This result could be explained by the religious differences between the two countries in which the studies took place. Tavares’ et al. (2001) study was undertaken in Brazil in which Catholicism is the predominant religion of that country. Unlike Brazil, Catholicism is not the predominant religion of Australia where this study was undertaken. Christianity predominates, of which Catholicism forms only a part thereof. It is therefore not surprising that Tavares, et al. (2001) found no significant relationship between pathological gambling and religion.

The significant gender difference between pathological EGM gambling and marital status partially supported the findings of Tavares et al. (2001) as they also found a significant relationship between pathological gambling and marital status. However, the results differed in that this study found single males were more likely to be pathological gamblers compared to Tavares, et al. who found single females were likely to be pathological gamblers. This difference could be explained by the differences in the “single” status category. In this study, the “single” category excluded the divorced, separated and widowed categories. Thus, inclusion to the status of the “single” category was “never married”. However, unlike this study, Tavares, et al. (2001) included the status of divorced, separated and widowed into the “single” category. Hence, the differences in the categorisations could be a possible explanation for the gender difference in the result for marital status.

In summary, the results of this study suggest that EGM gambling is an Australian phenomenon and that there is a gender difference, as the probable pathological EGM gambler is likely to be male, under the age of 45 years and of the Greek Orthodox faith. The implications of this study suggest different forms of gambling suit different cultures and that other issues pertaining to cultural aspects of gambling need to be explored in greater depth. One study of women’s gambling behaviour reviewed, suffered some serious methodological drawbacks including: small sample size, unrepresentative sampling and/or very low response rates, absence of male comparison group and lack of valid psychological tests of gambling addiction. Therefore further research in this area is essential.
References


Problem gambling counselling and community development within South East Asian communities

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Abstract
In recent years, an increasing amount of research has been conducted about problem gambling in the Culturally and Linguistically Diverse (CALD) communities of Victoria, more particularly in Asian communities (VCGA 1999, City of Monash 1999, Jesuit Social Services 1999). The present paper outlines the authors experience as a Counsellor and Community Educator working with the South East Asian community. The data was collected through contacts with both gambling and non-gambling clients during two campaigns in the Vietnamese program of SBS radio in 2000. The initial stage focused on awareness and community education in attempt to encourage people to access counseling. These two advertising strategies were successful in increasing the number of registered clients. Issues for gamblers and non-gamblers will be discussed in the present paper. While the issues in this community are similar to issues in the general community, a number of variations exist. Whilst isolation is one of the most common issues for clients across cultures, the lack of support from extended family and of knowledge about the social system as well as language barriers in the South East Asian community, increase isolation and risk. It is important to note that counselling is an unfamiliar and somewhat unwelcome concept to people of Asian culture, who do not seek counselling for a range of reasons (eg. fear of losing face, unawareness of services available, no concept about counselling, etc.). Thus, obstacles in working with clients from this community include their perception about the role of a counsellor, expectations from services as well as their level of engagement in and commitment to counselling.
Counselling - an unfamiliar concept in Asian culture

It is quite common in Western society that when a person, couple or family are experiencing personal or relationship problems, seeing a counsellor is seen as an appropriate method for resolving the difficulties.

However, counselling does not exist in Asian and many other cultures. Traditionally, people will seek and follow advice from the elders in their extended family such as grandparents, parents and older relatives. Even the counsel of elderly neighbours or very close and well-trusted family friends may be sought to help resolve conflicts.

This preference extends to help seeking when people of Asian background migrate to Australia. With or without the support of extended family, people tend to manage problems themselves at first. There is a lingering hesitance and reluctance to access counselling services, for a number of reasons:

1. Fear of losing face
2. Fear of feeling “a failure” for not coping well with their circumstances
3. Feelings of guilt for revealing family secrets to an outsider, and
4. Lack of knowledge of what counselling is about and how it can help.

As a result, people only ask for help when matters are getting out of hand or perhaps totally out of control. We, the service providers, are the last resort. Even when potential clients do make contact, the concept of counselling and the role of a counsellor are still very unclear. The majority of clients perceive that a counsellor is a knowledgeable expert who will guide them in the proper course of action, or give them a straight answer/solution to their problems.

Methods of accessing the Vietnamese Community

The above issues make accessing clients from Asian backgrounds particularly difficult. Therefore, Gambler’s Help Southern has put into practice a range of methods to access the Vietnamese community. This includes print media campaigns, materials distribution, interviews on SBS radio and community television, direct approach to other community specific services, the establishment of a Vietnamese Worker’s Network in the City of Greater Dandenong and the formation of a Vietnamese Worker’s Network (named “Starting Point”) across Gambler’s Help and other gambling support services for the Vietnamese community in Melbourne. Details are as follows:

1. An English-Vietnamese brochure about the service distributed to community agencies, doctor’s surgeries, through community education sessions, etc.
2. A joint print media campaign with Gambler’s Help Northern and Eastern in one of the most popular weekly magazines “TV Tuan san”.
4. Interviews on SBS about gambling and related issues, and Gambler’s Help services offered to the community.
5. A joint interview on SBS with other Vietnamese workers from “Starting Point” to raise awareness about gambling issues and services available across the regions.
6. A joint interview on Channel 31 Community Television Vietnamese program with other Vietnamese workers from Gambler’s Help Eastern and Northern.

7. One full day participation in the Lunar New Year festival in Springvale to promote Gambler’s Help services to the South East Asian community. This festival attracts thousands of local people and therefore it is always a good opportunity to reach this client group. Items distributed at this festival consist of generic products (eg. show bags, “A Better Bet” cards, former G-line cards, key rings, fridge magnets, Gambler’s Help pens etc.), and products in the Vietnamese language (eg. brochures, written articles, pens, A3 size New Year calendars, business-card-sized twelve month calendars and balloons.

8. The Vietnamese Worker’s Network in the City of Greater Dandenong. The aim of the network was to establish a stronger link between services in the area, however the response was poor for various reasons eg. insufficient time and/or interest, therefore the network was eventually cancelled.

9. The Vietnamese Worker’s Network, “Starting Point”, between Gambler’s Help services and other Vietnamese gambling support services in Melbourne. The aim, again, was to build up a link between gambling support services for the Vietnamese community across regions; share information; initiate, plan and implement community projects together, etc. Discussions in network meetings include production of a newsletter, a one-day activity program for elderly citizens across Melbourne, the possibility of establishing a hot line, and an advertising campaign on SBS radio. Unfortunately, differences in resources between the organisations in the network make it difficult to work towards these initiatives, and with changes in employment amongst some members, the network has ceased operation. A newsletter has been created, but not published.

Having tried the above methods, it was found that they produced only a limited counselling referral rate. Although the Lunar New Year festival is a good opportunity to promote our service, there is no immediate result. Of the above, the interview sessions on SBS proved to be more effective, as there were a number of enquiries and self-referrals after people listened to the program.

Advertising campaign on SBS radio
Given that SBS radio is the most powerful media channel to provide news and disseminate information to people from culturally and linguistically diverse background in their own language(s), and that the program broadcasting in Vietnamese has attracted a large proportion of listeners, Gambler’s Help Southern decided to conduct an advertising campaign on SBS radio targeting counselling services for the Vietnamese community of Melbourne.

Method of advertising
Two campaigns were run using the Vietnamese program, in March 2000 (50 spots) and September 2000 (20 spots), airing a 30 second message in Vietnamese. The first campaign was intensive, running seven times a week and the second campaign three times a week.

Message used in the campaign
The message aimed to target both gamblers and family members of the gamblers. The wording of the message was carefully selected to make it non-offensive. The message is to encourage people to contact the Vietnamese-speaking worker on a direct number (See appendix 1).
There is also a message recorded on the answering machine in Vietnamese and English language to assure callers that they have reached the right service when the worker is not available. The calls are returned as soon as possible and appointments are usually made within the same week (see Appendix 2).

**Results of Advertising campaign**

Data contained in this paper were collected during client contacts throughout the advertising campaign and subsequent weeks. Clients included gamblers and non-gamblers of both genders.

![Bar graph showing gender comparison between gamblers and non-gamblers](image)

*Figure 1.* Gambler’s Help Southern clients from Vietnamese background from 31st March 2000 to 5th March 2001.

Throughout the two campaigns and subsequent weeks, the total number of Gambler’s Help Southern clients from this target group was 58 (22 were gamblers and 36 were family members). The yearly total number of Vietnamese clients from other sources was 5 and, in the year before (1999-2000), the number was 7. Considering the cultural factors that hinder people from seeking help, this number has reflected a high level of success of the campaigns.

It may be seen from the above table that help seeking patterns varied with gender. The majority of gamblers seeking help were male; the majority of non-gamblers seeking help were female. However, there is insufficient evidence to indicate that problem gambling occurs more in men than women. It is also important to note that these figures do not reflect the total profile of people adversely affected by gambling problems in the community.

**Non-gambling client enquiries**

Typical queries from partners, family members and friends of gamblers concern how to stop their relatives from gambling. In all cases, people have already tried to handle their problems themselves, and have helped to pay off debts several times. It is common to seek help without the partner/relative’s knowledge and not want them to find out they have contacted the service. Most contacts are by phone and the majority makes only one contact. Some callers are reluctant to give a name and telephone number. However, there are others who leave their details on an answering machine that has a recorded message in both Vietnamese and English.
**Presenting Issues**

Presenting issues for this client group include:

1. Financial issues including unpaid utility bills, school fees, and gambling debts (often discovered by the non-gambler)
2. Emotional exhaustion (from false hope of problem resolution and promises by the gambler to stop gambling after chasing losses)
3. Physical exhaustion (working long hours to cover family expenses and debts)
4. Abuse by the partner in order to access money to gamble
5. Isolation (unable to tell anyone about their problems)
6. Pressure from family to leave or stay in the relationship with the gambler
7. Pressure from religious, moral and community beliefs to stay in the relationship (eg it is better to preserve a good name through maintaining a two parent family)
8. Legal issues (forged signature in joint accounts, letters from debt collectors, or concerns about joint assets, etc.)
9. Limited knowledge of the social system (both newly arrived and established migrants/refugees)
10. Feeling lost and confused.

**Gambling client enquiries**

Gamblers are self-referred, referred by their partner (through the radio campaigns) and via other agencies. Some gamblers approach the agency to seek financial assistance, whereas others admit gambling has become a problem for them and want to stop. Contacts may be by telephone or face-to-face. Better outcomes result from clients engaging in face-to-face counselling sessions.

**Common Processes**

1. Lying to family members until the problem is discovered through bank statements, letters from creditors, loan shark pressures and shortage of money for normal household expenditure
2. Using different addresses to apply for multiple credit cards
3. Promises to self and family members to stop when they have recovered all losses
4. Over-confidence about controlling gambling without professional help
5. Suicidal thoughts
6. Thoughts of engaging in illegal activities
7. Self-exclusion from the casino but uptake of gambling at local poker venues.

**Issues confronted**

1. Financial issues: unpaid debts, unpaid bills, inadequate funds for living expenses and/or loss of assets
2. Legal issues
3. Family breakdown
4. Socially isolation following other people discovering they have a gambling problem
5. Feeling trapped and depressed as gambling related issues are not dealt with and gambling problems worsen.
Discussion

Evaluation of the effectiveness of the two campaigns on SBS

As mentioned above, throughout the two campaigns, the number of Gambler’s Help Southern clients from Vietnamese background has increased significantly with the main referral source being the advertising campaigns.

Based on those cultural factors that may hinder people from seeking help, the higher number of registered clients suggests that campaigning on SBS radio is very effective in terms of:

1. Bringing awareness to the Vietnamese community about the gambling support services available in their own language; and
2. Encouraging people to access the service on the worker’s direct contact number.

Gambler’s Help Southern was successful in its aim to reach the Vietnamese community through a powerful media channel with a large number of Vietnamese listeners. The campaigns, targeting both gamblers and non-gamblers, and delivered in people’s first language, have encouraged these two client groups to access the service.

Being able to contact the worker on the direct number helps remove language barriers, which can be a hindrance to service access. People feel more comfortable communicating with the worker whom they feel can understand about gambling related issues and other cultural matters. These factors are likely to have spurred the increasing number of Gambler’s Help Southern clients during the two campaigns.

The number of contacts gradually decreased after the first campaign ended. There was a common perception from some clients during the second campaign that the service no longer existed because the advertising message was not heard on the radio. The number of clients from the second round of advertising (18) was less than the first (40) because the frequency of ads was reduced to three times a week over seven weeks. Some people kept the worker’s contact number since the first campaign, but only accessed the service during the second campaign because they thought that the service had ceased.

Counselling clients from South East Asian Backgrounds

Non-gambling clients

The focus of work with this group varies from client to client. Whilst people’s focus is not on their emotional needs, they do speak up about their feelings when invited. Clients feel partially relieved when they are listened to with a non-judgemental attitude and when they feel understood and assured that “it’s okay to cry”. Although engaged in counselling at this point, they may not be fully aware of this. To the client, they are simply confiding in the counsellor.

There are two main effects when harm minimisation strategies are applied to work with non-gambling clients:

1. One group believes that the strategies are very useful, as they come to term that they need to focus on their own needs and be a support person to their relative to deal with the gambling problems.
2. The other group believes that these strategies are not very helpful, as they have expected a “knowledgeable expert in the field”, who will be directive with instructions on “curing” a gambling problem. The expert should and must know how to stop someone from gambling immediately and permanently. Some clients want the counsellor to talk to their partner as an authority figure. To these clients, although they may feel relieved to some extent when counselled, their needs are not met.

In these two groups, people have helped their relatives to pay off gambling related debts and lived with many times of false hopes. When people realized that paying off debts might not change their relative’s gambling, and when they understood more about gambling behaviour and the counsellor’s role, people could then consider looking at other options that helped minimize the impacts of gambling on themselves and their families (the first group). When expectations were beyond the role the counsellor could fulfil, people found it difficult to accept focusing on their own needs rather than to trying to control their relatives’ gambling problems (the second group).

Other support offered to non-gambling clients includes applying for discretionary funds which provides financial relief, home visits (women with small children), attending meetings at other organisations as a support worker for clients, providing information, liaising with other agencies and referring clients to other services.

Provision of a gambling counselling-only service would be detrimental for this group, which may have settlement or other issues. To provide a more effective service, the counsellor should also be sensitive to related issues such as fear of bureaucracy when attending interviews, lack of knowledge about their rights and other support services etc, and help them to have their needs met.

Gambling clients

There are similar reasons for gambling problems across all cultures eg a hope to win large sums, gambling to pay bills, to achieve time out, attractiveness of the venues, loneliness, personal issues, family problems, grief and loss issues and/or unemployment, etc. For the South East Asian community, settlement issues are an important contributing factor to problem gambling (hoping to change their living situation; dreams of being successful and accepted, or relieving social isolation).

There are some people who prefer to work out their gambling related issues and for whom the need to gamble has eventually vanished. Some have chosen self-exclusion to put a final stop to their gambling and/or to give their partner long term reassurance. Only one person (not previously registered with the program) has indicated a desire to revoke their casino self-exclusion.

The rationale for providing other support besides counselling is very similar to that for non-gambling clients. Counselling alone will not make for the most effective service; it is important to assist people to have their other needs met to enable them to deal with their gambling issues effectively.

When appropriate, the worker attends with her clients as a support person self-exclusion interviews at Crown casino, the Australian Hotels Association and sessions with other agencies. Language barriers and fear of bureaucracy when attending interviews either for the self-exclusion programs or interviews with other agencies can be very concerning for these clients, and support from the counsellor will help them go through the process with less stress.
The common reaction after attending self-exclusion interviews is a sense of relief at the prospect of a fresh start. Being interviewed can be a shaming experience for people, but it can also act as a powerful method to curtail their gambling (as can seeing a counsellor). Breaching self-exclusion would be unlikely to occur with these clients, partly because they are legally bound to comply with the signed Casino document, but mainly because they wish to bring changes in their life (having had enough of gambling).

Referrals to other services are made according to individual needs eg. Financial counselling, legal services, housing support services, health services, material aid agencies, etc. Generally, people are quite happy to be linked to other support services that they may not have been aware of. The worker usually initiates contact on behalf of clients to arrange the appointment (and arrange an interpreter when necessary). However, there is a reluctance to be referred to a doctor for a mental health assessment as it is viewed as admission of a mental health problem.

**Recommendations**

**Publicity of service**

Print media campaigns, material distribution and direct approach to other community specific services had produced only a limited counselling referral rate. An intensive campaign targeting problem gambling on generic television channels or radio stations did not result in an effective response from clients of Vietnamese background either.

The service was encouraged that despite the existing barriers to help seeking, a culturally and linguistically appropriate counselling service can succeed in reaching this group if the appropriate medium is found. Results of the two campaigns suggest advertising on SBS is an effective approach for this client group.

Therefore it is recommended that, if funding resources are available, advertising campaigns on SBS should continue on an on-going basis, initially intensive and gradually less frequent. Advertising on community television should also be considered.

**Community Education**

As already discussed, counselling is unfamiliar to Asian communities, and it may take quite a long time before it is widely accepted as it is in Western cultures. To help people understand the benefits of counselling and financial counselling, and encourage them to access help services, it is vital to continue to deliver community education. This will assist in raising awareness of gambling related issues and provide information about the service, although community education may not result in a high referral rate at this stage.

Community education includes presentations to groups, other publicity methods (eg. interviews on SBS radio, products and print material), and most importantly, displays at specific community festivals such as Lunar New Year. Collaboration between Gambler’s Help services across regions is also useful to help produce and distribute products in the relevant language/s at community festivals.

**Working with clients from South East Asian Communities**

Counsellors all have the necessary tools to work with clients, yet little extra is required to make our work more effective with clients from this cultural group. Here are some “take away”
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messages to be drawn from the experience of working with this client group in comparison to the general community.

People are quite reluctant to ask for help. They may think it over several times before actually contacting the service. It is crucial that we break down feelings of uneasiness about revealing to an “outsider” their personal or family problems. This requires:

1. A warm response and reassurance of confidentiality
2. An invitation to talk about their own feelings (which is normally suppressed and discouraged in the client’s culture)
3. Acknowledgement of their feelings (which may be implicitly unspoken and/or missing in client’s contact with other people around them)
4. Reassurance that it is okay to cry if this occurs
5. Reassurance that we have time to listen (people may feel they are taking our time or they are “bothering” the counsellor with their problem)
6. Acknowledgement of the difficulties they are facing (which makes people feel understood)
7. An offer to support them to go through the process

Other cultural factors to consider in counselling clients from South East Asian background

It is not unusual for people to ask a bilingual counsellor about their family background, marital status, number of children, age, years in Australia and their place of origin. This is how this group of clients forms trust and rapport with the counsellor, therefore it is very important that we understand these cultural aspects and do not see them as intruding into one’s personal life.

Warm acceptance can be expressed both verbally and non-verbally, for instance, asking clients about their health, offering them a cup of tea or coffee, offering to hold their child (when a mother has a small child with her and needs to get something from the pram), offering to contact other relevant services on their behalf and to attend meetings with other agencies as a support person.

As the discourse structure is different in Asian cultures, it is necessary to allow time for clients to present the problems in their own way without any disruption (even though sometimes it is quite frustrating!). A full assessment may not be obtained at the first session because the client will not “get the issues off their chest” all at once, and they do need time to develop a trusting relationship with the counsellor before further disclosing any issues.

We as counsellors need to feel comfortable with the client’s space and be flexible in listening to them. They may tell us many relevant (or sometimes irrelevant) stories related to their current problems eg. About their family and their life before and after migrating to Australia, and even “gossip” within the community, etc. However, it helps us to understand the client and their world better, and thus work with them better.

Some clients after sharing their feelings and family secrets may feel very guilty, uneasy and regretful. It is vital that we acknowledge and normalize these feelings, and reassure clients about the confidentiality of our service (including the confidentiality of the interpreter service).

Filling out a registration form or assessment form in the client’s presence can make them feel very anxious and threatened about confidentiality. Therefore, it is preferable to complete any forms after the client leaves, and not to bring a client’s file to interviews. A consent form to
participate in the evaluation of service quality is usually discussed with clients at the second meeting, when rapport has been established between the client and the counsellor.

**Provision of counselling and support service**

Another critical aspect is the need to combine counselling and support services. We should be sensitive to other issues that clients may encounter eg. Issues related to their settlement, welfare, immigration, and rights, etc. and help them to have these addressed. Further to our role as counsellor, we may sometimes act as an advocate for the client in liaising with other organisations, an information giver, a “connector” to link them with other relevant services and a support person for the client attending other agencies.

**Conclusion**

Counselling is a challenging task, more so in working with clients from the South East Asian community. Whilst counselling is still unfamiliar to this community, a number of clients have acknowledged the benefits it brings to their life. With the support they receive at times of need, people have been able to work out their concerns, regain control in their life and/or minimize the effects of gambling.

Although suppressing feelings is part of the culture, people do like to talk about their own feelings and to discuss their issues when they are offered positive regard and genuine respect. Men and women of all ages have felt comfortable to shed their tears during sessions and this, in fact, has enabled them to find a positive outcome to their problems.

We know that it may take a long time before people from South East Asian backgrounds fully understand counselling and access services at an earlier stage in their problems. Ongoing community education, publicity and media campaigns in community languages bring greater awareness of specialist problem gambling counselling services and encourage people to seek help. In the meantime, we continue to ensure to the best of our ability that clients are provided with the service they need through culturally and linguistically appropriate counselling and support services.

Last but not least, location of the South East Asian community worker at a local Community Health Service, where a range of other services are provided, helps alleviate people’s fear about being noticed by others from the same cultural background for attending a problem gambling service. Clients feel assured of confidentiality when they are offered a safe environment, and thus can focus on the discussion of their problems. This has lifted their fear of losing face, which is an incredibly important notion in the client’s culture and can be a hindrance to help seeking.
References

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Appendices

Appendix 1. Translation of the Vietnamese version:

Is gambling affecting you and your family? How many times did you want to stop but were unable to do so? Is your relative having a gambling problem and you don’t know what to do?

Please contact Break Even Southern problem gambling counselling services. Ring MyTien Lam on the direct number 8558 9121. This is a free and confidential service. Again, MyTien Lam on 8558 9121.

Appendix 2. Translation of the Vietnamese recorded message:

You have called Gambler’s Help Southern counselling service. Please leave your name, telephone number and message after the “beep”, we will contact you soon. The worker is working on Monday, Tuesday, Thursday and Friday from 9am to 5pm. For after hour service, please ring the telephone counselling service line on 1800 156 789. Thank you.
Abstract

In Australia as in much of the world, gambling opportunities are now ubiquitous. There is a large (and growing) literature that deals with the various pathologies of gambling. Yet an understanding of the role that gambling now plays in our social and cultural lives requires some examination of the everyday experience of ordinary people who gamble, but don’t experience trouble associated with this activity. Weber (1949) points out that there is a need for the development of ideal types to assist the process of social inquiry. If we are to make sense of some aspect of the social world we must first construct such an ideal type, and utilise it in a comparison with what we observe in the world. As researchers interested in the social and cultural processes that construct subjectivities, we believe that an understanding of the role that poker machine gambling plays in the ordinary lives of ordinary people is essential to the development of an understanding of the meaning that gambling generates within our social milieu. This paper presents a methodology for a phenomenologically based inquiry into these phenomena.

Prior to 1991, poker machine gambling was unlawful in Victoria. Since its legalisation in that year, poker machine gambling has grown rapidly to be by far the most significant gambling mode in that state, accounting for expenditures of well over $2 billion per year, and representing more than half of all money lost by gamblers in the state. There are about 30,000 poker machines in Victoria, 2,500 located at the Casino in Melbourne and the remainder distributed among more than 550 local hotels and clubs (Livingstone 2001).

As a consequence of the rapid growth of this mode of gambling, attention has been devoted to ascertaining its impacts on local communities, including impacts of an economic and social nature, and the impact of problematic gambling associated with these venues. The Victorian Casino and Gaming Authority, and its successor the Gambling Research Panel, have commissioned regular surveys of consumer attitudes to gambling, as well as other reports, which have, in part, sought information from those surveyed relating to the attitude they have to gambling, whether it is enjoyable, and whether it is perceived to do more harm than good, for
example (see, for example, VCGA 1999).

However, there is very little information to assist in the development of a detailed understanding of the experiences and perceptions of ordinary people who use poker machines regularly and who do not regard themselves as problem gamblers. Available evidence indicates that approximately 40% of the adult population use poker machines more than once per year (PC 1999: p.10). Of these, problem gambling prevalence studies suggest that the overwhelming majority (PC 1999: p.6.54) do not experience problems with their gambling, and are reported to utilise poker machines for recreation or entertainment.

This paper reports on a component of a broader research project that is concerned to explore the meaning that gambling has provided at the social level in late modernity, with particular reference to the experience of Victoria in the 1990s. In this paper, we argue that the development of some understanding of the role that poker machine gambling plays in the lives of ordinary (by which we mean non-pathologised) gamblers will assist in the development of a broader understanding of the impacts that gambling has in the general community, and will also assist the process of social and economic theorisation at the more general level. It is important also to realise that our research for this component of the project is essentially a small-scale pilot. We are testing out an idea for what may ultimately be a larger scale exercise in phenomenological research, a daunting project.

This paper discusses the research question we pose ourselves in this project, which is why phenomenology is an appropriate approach to addressing that question, and the bones of the methodology we intend to utilise.

Put simply, our research question is: what is the meaning that non-pathologised gamblers discover in the activity of poker machine gambling?

This is a simple question. Any answers, on the other hand, are likely to be multifarious and very complex.

It is also, and probably unfortunately, the case that phenomenology is itself a tendency that can best be described as a slippery fish par excellence. It has few if any clearly established and agreed doctrines, principals or teachings. Amongst other phenomenological tendencies are the analysis and description of consciousness, the extension of existentialism, a speculation on transcendental subjectivity, and a search for a philosophy that accounts for space, time, and the world as we experience and ‘live’ them. (Kockelmans 1999: p.665).

The tendency that comes closest to our approach for this study is the last in the list we referred to above, that is, the attempt to account for the human experience of space, time and the world. Edmund Husserl, the phenomenological pioneer, is said to have concluded that we can only understand the world scientifically if we first understand the Lebenswelt, the life-world of lived experience. In this, he was at one with Max Weber and some of Weber’s successors who were similarly interested in the life-world, and particularly in Weber’s case the way in which individuals came to pursue the Lebensführung, the ethical conduct of life, in an increasingly disenchanted, rationalised social world (Hennis 1988: pp.90-100).

The society that Weber spoke of was understood by him in the light of the actions of the individuals that composed it. Weber’s was not, however, an ontologically individualist method. He clearly understood the social basis of meaning, culture and values. Rather, Weber sought to understand the social behaviour of individuals by constructing a series of ideal types with the
individual as their category of organisation (Castoriadis 1990: pp.59-60). Weber seeks to explain human behaviour by what amounts to hermeneutic means — the capacity for empathetic understanding of another.

Beilharz points out that “we are both the authors of this world and its victims, for [the ideological] illusions [that are inherent in our being] become as hard as steel” (Beilharz 2000: p.171). Thus, the space for Lebensführung is the space that the steel shell affords us by mediating between our individual self and the rationalised, disenchanted and increasingly disciplined social order that perplexes us (Beilharz 2000: p.173). Castoriadis contributes to this discussion by pointing out that humanity “tends to relate everything to itself and to live everything as constantly sought-after meaning. This pleasure is essentially solipsistic, monadic … it is the pleasure of relating everything to oneself” (Castoriadis 1993: p.1). Castoriadis goes on to argue that the way humanity survives, in the face of the impossibility of absolute meaning, is “by creating society and the institution” (Castoriadis 1993: p.1) but we won’t be tempted down the path that leads to the abyss, as much as we might enjoy it.

It’s time to get back to torts. The first useful question to answer in practical terms might be: What is the life-world?

Wagner wrote that for Alfred Schutz, phenomenological sociologist and synthesiser of Husserl and Weber, the life-world “is the whole sphere of everyday experiences, orientations, and actions through which individuals pursue their interests and affairs by manipulating objects, dealing with people, conceiving plans and carrying them out.” Individuals, he argued, construct their own life world (echoes of Weber!) and do so by using the building blocks offered by others, by adapting existing tradition, custom, and belief as it is transmitted socially (Wagner 1973: pp.11-14).

The second question is: What constitutes society? Again, Schutz argues that the answer must be sought in the intentions and orientations of individuals, guided by their experience and knowledge of those spheres of experience which are relevant to them, that is, as elements of their life-world. What we share is those elements that are within common reach, the “zone of overlapping relevances” (Wagner 1973: pp.38-9).

The third, and vital question is: What process constructs meaning?

Addressing this issue, Schutz adapts Bergson’s idea of the durée, the inner stream of duration, the continuous coming to be and passing away of experiences, to argue that it is only when we pause to reflect on a particular experience, and in doing so to categorise it within the spatiotemporal logic of everyday rationalised life, that our experiences become meaningful. By reflection we remove ourselves from “the stream of pure duration”; experiences otherwise experienced as phases are transformed into discrete objects of attention; and thus “the Act of attention … presupposes an elapsed, passed away experience – in short, one that is already in the past … only a past experience can be called meaningful … meaning is an operation of intentionality which, however, only becomes visible to the reflective glance (Schutz 1973: pp.60-63).

Schutz also argues that there are other experiential categories, including those he calls ‘essentially actual’ i.e., those attached to the innermost core of the Ego, and those attached to the sphere of absolute intimacy whose ‘being there’ (Dasein) is indubitable [but] closed to our inspection” (Schutz 1973: p.64).

But the recollection of events in the external world is relatively clear, and although there are limits to the recall of those events, “the limit of recall coincide exactly with the limits of
'rationalizability' … in the sense of ‘capable of giving a meaning’” (Schutz 1973: p.65). Thus, Husserl argued that “‘behaviour is a meaning endowing experience of consciousness’” (Schutz 1973: p.66).

It is also important to recognise that the rationalizability of meaningful experiences does not mean that our actions will be rational; on the contrary, Schutz argues, they are determined from a personal knowledge system that is incoherent, obscured and contradictory. Incoherent, because the interests of individuals are not coherently integrated (the hierarchy of plans for social life, work, family life etc is constantly shifting); obscured by the lack of full insight in most aspects of life — we use money without understanding what money is, similarly with computer, telephone, car — the expectation that the trains will run in the morning is at one with the expectation of the sun rising. Thus, we know very little in any detail; and contradictory because we may readily consider opposing statements as equally valid — our thought and interests are spread across many levels, and the accommodation required to reconcile all such levels is not apparent (Schutz 1973: pp.75-6).

Nonetheless, we do imbue experiences with meaning, return to them, construct them as markers for our life, and attach great meaning to objects and activities that have no necessary connection with the meaning we feel. Thus, a tree may mark the site of romance, as a piece of music or a scent. Thus, “a sign system is a meaning-context which is a configuration formed by interpretive schemes: the sign” and “meaning-connections hold not between signs as such, but between their meaning … between the experiences of the knowing self establishing, using, or interpreting the signs.” Further, “every sign system is … a system of our experience” and “within the sign system … the sign has the ideality of the ‘I can do it again’” if it is to have the possibility of repeating the synthesis of meaning (Schutz 1973. pp.106-7).

And how to interpret the sign system that someone else conveys through language? Within the discourse of the interlocutor there is a meaning beyond the meaning contained in discrete words, as conveyed by the distinction between the German words Wörter (unconnected words) and Wörte (discourse). “What I need at the moment of interpretation is the total context of … experience,” argues Schutz (1973: pp.106-110).

Thus, in recognition of the contours of Schutz’s practical phenomenology, we have developed a methodology for this project that is oriented towards the ordinary experiences of people who identify themselves as non-problem gamblers.

We propose to conduct interviews with people who respond to newspaper, radio and, where possible, direct invitations via ‘snowballing’ personal networks.

The bones of the process, however, will be the questions we use to construct a framework for our discussion with the interviewees. We view these questions as framing the ‘conditions of possibility’ for the interpretation of the question of meaning that is at the core of this research. It is important to realise that the questions we ask are very open-ended. We want to encourage the people we interview to reflect on their gambling experiences in a way that they may not previously have done, and one way to do this is to address issues of mundane detail. “The commonsense world of daily life conceals as much or more than it reveals”, as Natanson puts it (1988: p.188). There is also that unobserved strangeness of the everyday that is revealed only by a close examination of its taken-for-granted details, as the chasm between signifier and signified is sometimes revealed by the close observation of the written signifier.
Some of our questions are predictable and oriented towards intended to elicit a type of baseline about people themselves. Other questions, we think, are a little less obvious, and we have also included questions that refer to spatial/temporal conditions or experiences, and very open questions about the things people like about playing the pokies, and what they dislike. We ask how people feel, and how people perceive their history in terms of winning or losing. We have 34 questions in our schedule, but we anticipate asking fewer questions to most interviewees, in the expectation that people, encouraged to talk about themselves, will find such a self-reflective activity appealing.

Overall, we are seeking to elicit a level of reflection on the part of our interviewees that, by encouraging them to talk in detail about the mundane and quotidian experience of playing the pokies, provides a possibility that they will themselves uncover a sense of meaning that they had not previously considered; and which will enable the researchers to immerse themselves in the discourse of the pokie player, and in doing so uncover a body of meaning that will illuminate the puzzle about why the pokies appeal to and provide meaning for some and not others, and how this appeal and this meaning relates to the life-world, and helps to construct the Lebensführung of those people.
References


Optimism bias and gambling

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Abstract
Optimism bias in gambling implies that gamblers believe that their chances of winning are higher than other gamblers. In the present study, gamblers and non-gamblers played a computerised roulette game, in which an illusion of control was induced via early wins and near misses. It was hypothesised that participants experiencing these illusion of control inductions would be more optimistic over future outcomes of the game, and that these effects would be stronger for gamblers than non-gamblers. It was also hypothesised that gamblers would be overly optimistic concerning gambling in general. Motivations for gambling will be discussed in light of the results of this study.

Introduction
Optimism bias is the tendency for people to believe that they are more likely to experience positive events, and less likely to experience negative events relative to their peers (Weinstein, 1980). In a group, some individuals may be realistic in their appraisal of event likelihood, but as a group not everyone can have a below or above average chance of experiencing an event. If on average people see themselves as better than average then they are making a systematic error. Optimism bias therefore operates at a group level. However, when optimism bias is applied to such events as “winning at gambling games of chance (e.g. pokies)”, then optimism bias may be found at an individual level. It is unrealistically optimistic to believe that one has a higher chance than the average gambler of winning at the pokies. With respect to gambling games of skill, certain gamblers may have an edge over other gamblers, but as a group not every gambler can have an above average chance of winning. Thus optimism bias operates at a group level with gambling games of skill. It has been hypothesised that an illusion of control over outcomes is the cause of optimism bias with respect to gambling (Lo, 2000).

The aim of the present study was to induce an illusion of control within a computer-simulated Roulette game and then to examine whether this illusion of control causes the player to be comparatively optimistic about future outcomes of the roulette game. It was predicted that non-
gamblers would not be as sensitive to the illusion of control as gamblers, and thus demonstrate less or no gambling optimism bias. It was also predicted that gamblers would be comparatively optimistic about (general) future gambling successes, while non-gamblers would reveal very little optimism.

**Induction of the Illusion of Control and General Hypotheses**

In the first study gamblers and non-gamblers played a computer-simulated roulette game, which was rigged so that participants either had early successes and late failures (win-loss), or early failures and late successes (loss-win). In this way an illusion of control could be induced, based on early wins (as in Langer & Roth, 1975). Illusion of control was also induced by a “near-miss” procedure (Reid, 1986; Griffiths, 1991). Some participants experienced many near misses, while others did not, however these were independent of the outcomes. The overall number of wins and losses was the same for all groups.

It was hypothesised that participants experiencing near misses and/or early wins would reveal an increased illusion of control, compared with participants experiencing no near misses and/or early losses. It was also hypothesised that when gamblers experience near misses and/or early wins, the illusion of control induced is greater than for non-gamblers experiencing near misses and/or early wins (due to non-gamblers “intrusion of reality” (Langer, 1975)). Moreover, familiarity (Langer, 1975) with a gambling situation and a priori biased perceptions of gambling may enhance gamblers’ control perceptions.

**General Hypotheses in relation to Gambling Optimism Bias**

After the roulette game, all participants were required to rate their chances (compared with the average gambler of their age and sex) of winning (among other events) at the roulette game, assuming they were to play again. They were also asked to rate their chances of winning (among other events) with respect to gambling in general.

It was hypothesised that comparative optimism with respect to the roulette game would be greater for participants experiencing near misses and/or early wins than those experiencing no near misses and/or early losses. It was also hypothesised that gamblers, given the same illusion of control induction (i.e. near misses and/or early wins) as non-gamblers, would reveal greater comparative optimism than non-gamblers, since they may be more susceptible to the illusion of control. Moreover, familiarity (Langer, 1975) with a gambling situation and a priori biased perceptions of gambling may enhance gamblers’ comparative optimism. Finally, it was hypothesised that gamblers would demonstrate an optimism bias (Weinstein, 1980) with respect to the game, while non-gamblers would be more realistic in their appraisal and thus demonstrate little or no bias (due to an “intrusion of reality”).

Comparative optimism (and pessimism) with respect to gambling in general was also investigated. It was hypothesised that gamblers would demonstrate optimism bias, and non-gamblers would be expected to show comparative pessimism, but not unrealistic pessimism (Dolinski, Gromski, & Zawisa, 1987), since they were comparing themselves with gamblers (and thus may be justified in believing that they have less chance than the average gambler of winning). The only exception to this is gambling games of chance. Non-gamblers have no justification for being “worse than the average gambler” at chance games, given that the rules of the game are easy to grasp.
Method

Participants

Participants were 121 Psychology 1 students from the University of Sydney who participated for course credit. Participants were divided into gamblers and non-gamblers, based on the criterion of having gambled five times or more in the past year. 60 participants (24 males, 36 females) were gamblers and 61 (15 males, 46 females) non-gamblers. The gamblers gambled an average of 21.65 times in the past year. The figure for non-gamblers was 1.85. The average age of the participants was 20 years (range 17 to 50).

Dependent variables

Illusion of Control

Illusion of control was measured by three composite variables: C1, C2, and C3. C1 measured confidence levels during the game, by asking participants to indicate his or her confidence of winning on the next spin of the roulette wheel. Participants had to place a mark on a 10cm visual analogue scale ranging from 0 (no confidence at all) to 100 (very confident). A score from 0 to 100 was obtained, based on the position of the mark on the line. C2 measured confidence levels after the game, by asking participants questions concerning control over the game (e.g. how much control did you have over the outcome of the game?). These too were scored using a 10cm visual analogue scale. C3 also measured confidence levels after the game, with questions that required a numerical response (e.g. If you played the game for 100 more trials, how many do you think you would win?)

Specific game Comparative Optimism

Optimism was measured by four optimism bias-style questions concerning the roulette game. These appear in Table 3. The questions asked participants to rate their chances (compared with the average gambler) of winning overall in the roulette game, among other events. Below each question was a seven-choice Likert scale, ranging from “much lower chance than the average gambler” (score= 1) to “much higher chance than the average gambler” (score= 7). For a positive event, comparative optimism is indicated by a score above 4 (4= “same chance as the average gambler”); for negative events, comparative optimism is indicated by a score below 4. The scores on these questions were measures of the dependent variable.

General Gambling Comparative Optimism

The dependent variables were comparative optimism with respect to gambling in general. This was measured by 7 optimism bias-style questions. These appear in Table 6.

From a list of 16 gambling games, participants were asked to pick the gambling game of skill in which they had the most skill. They were also asked to pick the gambling game of chance that they preferred most to play. These choices were based on what participants perceived as skill and chance games. After choosing their preferred gambling games of skill and chance, participants were then given the set of optimism bias-style questions, with respect to these games. The format for the questions was as per the specific game questions.
Results

Induction of the Illusion of Control

There was a significant main effect of win-loss status (F (1,88)= 4.79, p<.05) on C1 (control measured during the game), such that the mean for the win-loss group (X=81.54) was significantly higher than the mean for the loss-win group (65.55). Table 1 presents a summary of the means of C1, C2 and C3 as a function of win-loss status. The means were all in the hypothesised direction (i.e. win-loss more control than loss-win) but the effect of win-loss status on C2 and C3 did not reach significance. This was probably due to their small effect sizes. There were no effects of near miss status for C1, C2, and C3, and no effects of the planned contrast between the near miss/win-loss group and the no near miss/loss-win group.

Table 1. Means of control factors C1, C2 and C3 as a function of win-loss status

<table>
<thead>
<tr>
<th></th>
<th>C1 (control during game)</th>
<th>C2 (visual perception of control)</th>
<th>C3 (numerical perception of control)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Win-loss</td>
<td>81.54</td>
<td>89.61</td>
<td>114.82</td>
</tr>
<tr>
<td>Loss-win</td>
<td>65.55</td>
<td>79.25</td>
<td>112.73</td>
</tr>
</tbody>
</table>

Table 2. Means of control factors C1, C2 and C3 as a function of gambling status. Using an ANOVA, there was a significant main effect of gambling status (F (1,88)= 4.07, p<.05) on C1 (control during game), such that the mean for gambler (X= 81.37) was significantly higher than the mean for non gambler (X=66.68). The means for C2 and C3 were in the hypothesised direction (i.e. gamblers experienced more control than non gamblers) however these means did not reach significance. Interactions were also performed to ascertain whether the illusion of control effects were greater for gamblers than non-gamblers. However, these did not reach significance. Thus while gamblers were more confident overall than non-gamblers about the game the effects of the specific inductions were not greater for gamblers than non-gamblers.

Table 2. Means of control factors C1, C2 and C3 as a function of gambling status

<table>
<thead>
<tr>
<th></th>
<th>C1 (control during game)</th>
<th>C2 (visual perception of control)</th>
<th>C3 (numerical perception of control)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gambler</td>
<td>81.37</td>
<td>85.66</td>
<td>123.06</td>
</tr>
<tr>
<td>Non gambler</td>
<td>66.68</td>
<td>83.36</td>
<td>104.90</td>
</tr>
</tbody>
</table>

The effect of illusion of control on specific game comparative optimism

A three-way (gambling status x near miss status x win-loss status) analysis of variance and planned contrasts were performed on the four specific game optimism bias questions. No effects
of near miss status and win-loss status reached significance (smallest $p > .10$). Moreover, there were no significant effects for the planned contrast between near miss/win-loss and no near miss/loss win. Participants did not demonstrate increased comparative optimism (with respect to the game) when they experienced near misses and/or a win-loss sequence.

There was a main effect for gambler status. Table 3 presents a summary of the means of the specific game optimism questions, as a function of gambler status. The means are presented, together with the F-values and significance level achieved. The pattern of results suggests that gamblers were more comparatively optimistic than non-gamblers concerning the game. Again, however, there were no significant interactions between gambler/non gambler and the control inductions. Thus while gamblers were more optimistic overall than non-gamblers, the effects of the specific inductions were not greater for gamblers than non-gamblers.

Table 3. Means for the specific game optimism bias questions as a function of gambler status

<table>
<thead>
<tr>
<th>Q1. Losing overall</th>
<th>Q2. Gambling strategy successful</th>
<th>Q3. Winning overall</th>
<th>Q4. Winning on next trial after 5 losses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non gambler: 4.26</td>
<td>Non gambler: 3.46</td>
<td>Non gambler: 3.38</td>
<td>Non gambler: 4.04</td>
</tr>
<tr>
<td>F-value: 4.97*</td>
<td>F-value: 11.36**</td>
<td>F-value: 11.55**</td>
<td>F-value: 1.41</td>
</tr>
</tbody>
</table>

*p<.05, **p<.01.

Note: a mean rating of 4 is equal to average

To test optimism bias among gamblers, one sample t-tests were also conducted for each event. The results are shown in Table 4. Although there were differences between gamblers and non-gamblers in comparative optimism, gamblers (on their own) were not optimistically biased about the events (optimism bias is revealed by a mean score significantly above or below 4). Therefore gamblers believed their chances of experiencing the events as approximately average. Interestingly, non-gamblers, on the other hand, were comparatively pessimistic on two of the four events (winning overall and gambling strategy successful). 42% of non-gamblers believed they had a below average chance of winning overall, while only 10% believed they had an above average chance.
Table 4. Means for the specific game optimism bias questions as a function of gambling status, together with results of one-sample t-tests

<table>
<thead>
<tr>
<th>Question</th>
<th>Mean</th>
<th>S.D.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. Losing overall</td>
<td>Gambler: 3.83</td>
<td>Gambler: 0.98</td>
<td>Gambler: -1.18</td>
</tr>
<tr>
<td></td>
<td>Non gambler: 4.26</td>
<td>Non gambler: 0.92</td>
<td>Non gambler: 1.99</td>
</tr>
<tr>
<td>Q2. Gambling strategy successful</td>
<td>Gambler: 4.19</td>
<td>Gambler: 0.92</td>
<td>Gambler: 1.42</td>
</tr>
<tr>
<td></td>
<td>Non gambler: 3.46</td>
<td>Non gambler: 1.20</td>
<td>Non gambler: -3.19*</td>
</tr>
<tr>
<td>Q3. Winning overall</td>
<td>Gambler: 4.10</td>
<td>Gambler: 0.95</td>
<td>Gambler: 0.76</td>
</tr>
<tr>
<td></td>
<td>Non gambler: 3.38</td>
<td>Non gambler: 1.16</td>
<td>Non gambler: -3.78**</td>
</tr>
<tr>
<td>Q4. Winning on next trial after 5 losses</td>
<td>Gambler: 4.25</td>
<td>Gambler: 1.00</td>
<td>Gambler: 1.73</td>
</tr>
<tr>
<td></td>
<td>Non gambler: 4.04</td>
<td>Non gambler: 0.86</td>
<td>Non gambler: 0.33</td>
</tr>
</tbody>
</table>

*p<.01, **p<.001.

Note. A mean rating of 4 is equal to average

General gambling comparative optimism

The type and prevalence of the skill and chance games as chosen by gamblers and non-gamblers are shown in Figure 1 and Figure 2. The most noticeable feature is the high number of non-gamblers (19.3%) who chose blackjack as a game of chance, when in fact there are strategies one can adopt to increase chances of winning (Wagenaar, 1988).
Figure 1. The gambling games of skill chosen by the participants.
Gamblers were more optimistic than non-gamblers concerning gambling in general. Table 5 presents a summary of these results.

*Figure 2.* The gambling games of chance chosen by the participants
Table 5. Means of the general gambling optimism bias questions, as a function of gambling status, together with results of one-way ANOVAs

<table>
<thead>
<tr>
<th>Question</th>
<th>Mean</th>
<th>F-value</th>
</tr>
</thead>
</table>
| Q1. How much skill do you have in this game (i.e. your preferred game of skill)? | Gambler: 4.93  
Non gambler: 2.62 | 94.29***    |
| Q2. How good are you at this game of chance (i.e. your preferred game of chance)? | Gambler: 4.15  
Non gambler: 3.15 | 25.60***    |
| Q3. Winning overall in game of skill                                      | Gambler: 5.02  
Non gambler: 3.51 | 57.59***    |
| Q4. Winning overall in game of chance                                     | Gambler: 4.28  
Non gambler: 3.66 | 16.12**     |
| Q5. Your gambling strategy successful overall in game of skill            | Gambler: 5.00  
Non gambler: 3.72 | 50.62***    |
| Q6. Losing overall in game of skill                                       | Gambler: 3.32  
Non gambler: 4.39 | 35.51***    |
| Q7. Losing overall in game of chance                                      | Gambler: 3.80  
Non gambler: 4.21 | 7.70*       |

Note: A mean rating of 4 is equal to average; *p<.01, **p<.001, ***p<.0001

One sample t-tests were also conducted to obtain gamblers’ and non gamblers’ optimism bias. The results are presented in Table 6. The results reveal that gamblers were optimistically biased in five of the seven events, and non-gamblers comparatively pessimistic in five of the seven events. It must be noted that because non-gamblers were comparing themselves with gamblers, this pessimism may be justified, and hence not a bias. It is analogous to non-smokers accurately rating their chances of lung cancer as lower than the average smoker (e.g. Lee, 1989). However, with respect to chance games, non-gamblers cannot have a lower chance than gamblers of winning, or have less ability than gamblers at these games. This is provided that non-gamblers know the basic rules of the game. Therefore, considering the question “winning overall in game of chance”, non-gamblers do show pessimism bias (t (60)=−3.15, p<.01), since one cannot have a lower chance than others of winning in a chance game. Additionally, non-gamblers were pessimistically biased about how good they are at their preferred chance game (t (60)=−5.11, p<.001), since one cannot be “bad” at a chance task.

71.2% of gamblers rated their skill as above average and only 10.2% rated their skill as below average. Moreover, 75% of gamblers rated their chances of having a successful gambling strategy as above average, while only 33% rated their chances as below average. For non-gamblers, 13.3% rated their skill as above average and 70% rated their skill as below average. For the question “winning overall in game of skill”, 76.7% of gamblers rated their chances as above average and only 33% (or two out of sixty gamblers) rated their chances as below average. The percentages for non-gamblers were 21.3% and 39.3%.

With respect to chance games, in which optimism or pessimism bias can be identified at an individual level, 23.3% of gamblers rated their ability as above average and 16.7% rated their ability as below average. For non-gamblers, 4.9% rated their ability as above average while 41%
rated their ability as below average. For the question “winning overall in game of chance”, 23.3% of gamblers rated their chances as above average and 6.7% rated their chances as below average. For non-gamblers, 4.9% rated their chances as above average (i.e. 3 participants), and 26.2% rated their chances as below average.

Table 6. Means of comparative likelihood ratings for gamblers and non-gamblers, across the 7 general gambling optimism bias questions, together with results of one-sample t-tests

<table>
<thead>
<tr>
<th>Event</th>
<th>Mean</th>
<th>S.D.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. How much skill do you have in this game (i.e. your preferred game of skill)?</td>
<td>Gambler: 4.93</td>
<td>Gambler: 1.16</td>
<td>Gambler: 6.19***</td>
</tr>
<tr>
<td></td>
<td>Non gambler: 2.62</td>
<td>Non gambler: 1.43</td>
<td>Non gambler: -7.51***</td>
</tr>
<tr>
<td>Q2. How good are you at this game of chance (i.e. your preferred game of chance)?</td>
<td>Gambler: 4.15</td>
<td>Gambler: 0.82</td>
<td>Gambler: 1.42</td>
</tr>
<tr>
<td></td>
<td>Non gambler: 3.15</td>
<td>Non gambler: 1.30</td>
<td>Non gambler: -5.11***</td>
</tr>
<tr>
<td>Q3. Winning overall in game of skill</td>
<td>Gambler: 5.02</td>
<td>Gambler: 0.93</td>
<td>Gambler: 8.47***</td>
</tr>
<tr>
<td></td>
<td>Non gambler: 3.51</td>
<td>Non gambler: 1.23</td>
<td>Non gambler: -3.11**</td>
</tr>
<tr>
<td>Q4. Winning overall in game of chance</td>
<td>Gambler: 4.28</td>
<td>Gambler: 0.865</td>
<td>Gambler: 2.54*</td>
</tr>
<tr>
<td></td>
<td>Non gambler: 3.66</td>
<td>Non gambler: 0.85</td>
<td>Non gambler: -3.15**</td>
</tr>
<tr>
<td>Q5. Your gambling strategy successful overall in game of skill</td>
<td>Gambler: 5.00</td>
<td>Gambler: 0.844</td>
<td>Gambler: 9.18***</td>
</tr>
<tr>
<td></td>
<td>Non gambler: 3.72</td>
<td>Non gambler: 1.11</td>
<td>Non gambler: -1.96</td>
</tr>
<tr>
<td>Q6. Losing overall in game of skill</td>
<td>Gambler: 3.32</td>
<td>Gambler: 0.892</td>
<td>Gambler: -5.93***</td>
</tr>
<tr>
<td></td>
<td>Non gambler: 4.39</td>
<td>Non gambler: 1.08</td>
<td>Non gambler: 2.83**</td>
</tr>
<tr>
<td>Q7. Losing overall in game of chance</td>
<td>Gambler: 3.80</td>
<td>Gambler: 0.80</td>
<td>Gambler: -1.94</td>
</tr>
<tr>
<td></td>
<td>Non gambler: 4.21</td>
<td>Non gambler: 0.839</td>
<td>Non gambler: 1.98</td>
</tr>
</tbody>
</table>

Note. 1. A mean rating of 4 is equal to average; *p<.05, **p<.01, ***p<.001

Correlations

The was a significant correlation between relative skill judgment (in the skill game) and the question “winning overall in game of skill”, r = .69, p<.0005. There was also a significant correlation between relative ability judgment (in the chance game) and the question “winning overall in game of chance”, r = .65, p<.0005.

Discussion

Illusion of Control

Participants’ control perceptions of the game did not differ significantly across the various manipulations, when control was measured after the game. When control was measured during the game, however, gamblers appeared more confident overall than non-gamblers, and
participants experiencing a win-loss sequence were more confident overall than participants experiencing a loss-win sequence. A likely explanation is that the control measures taken after the game was not as reliable as those taken during the game (Ladouceur & Walker, 1996; Gaboury & Ladouceur, 1989). Moreover, participants were aware that they had won ten of the twenty games (the total winnings displayed on the screen gave an obvious clue as to how many games participants had won), and thus with hindsight participants became more objective in their control assessments. Therefore it is likely that a combination of unreliable measures and a dissipation of control with time and hindsight contributed to the lack of significant findings.

In terms of control measured during the roulette game, gamblers perceived more control than non-gamblers across all variants of the game, supporting the hypothesis that gamblers perceive more control in the game given familiarity with the gambling situation, and a priori biased perceptions of gambling. No gamblers stated that their preferred game was roulette, thus this finding was not a function of familiarity with roulette. It was perhaps more a function of familiarity with a general gambling situation, rather than familiarity with roulette per se. This supports Bandura’s (1977) self-efficacy theory - task familiarity or exposure enhances personal efficacy.

Participants in the win-loss group perceived more control than those in the loss-win group, supporting the hypothesis that a win-loss sequence induces an illusion of control. The variable near miss status had no effect on control perceptions during the game. This was probably because participants in this group experienced 14 (out of 20 games) near misses. Repeated exposure to near misses will reduce their control-inducing capabilities (Reid, 1986; Chantal, Vallerand, Ladouceur & Ferland, 1995), since it then becomes case of crying “wolf” (Reid, 1986). Therefore the overuse of the near misses may have led participants to become desensitised to them, thereby reducing the effects of the manipulation.

Specific Game Comparative Optimism

Gamblers, across all illusion of control inductions, were more comparatively optimistic about future outcomes of the game than non-gamblers. Gamblers were especially more comparatively optimistic about winning overall (again) and having a successful gambling strategy than non-gamblers. However, the actual manipulations of the game did not appear to differentially affect participants. Participants experiencing near misses and/or a win-loss sequence did not have significantly higher comparative optimism than those experiencing no near misses and/or a loss-win sequence. Moreover, the illusion of control inductions did not produce greater comparative optimism in gamblers than non-gamblers.

Although gamblers were comparatively more optimistic than non-gamblers with respect to the game, they were not optimistically biased. Gamblers, as a group, were realistic in their judgements of the roulette game. They believed they had the same chance as the average gambler of, for example, winning overall. Thus the hypothesis that gamblers would demonstrate an optimism bias was not supported. There are two hypothesised reasons for this. One is that the near miss variable may have been oversensitive. Initial aims at inducing an illusion of control via near misses may have had the opposite effect. Gamblers (and non gamblers) may have believed that the near misses were crying “wolf”. Another reason for the lack of optimism bias in gamblers is the fact that all participants were aware that they had won ten of the twenty games. Thus, knowledge of this fact may have “coaxed” gamblers to believe that the roulette game was chance-based.
Non-gamblers, however, demonstrated significant comparative pessimism with respect to the game; 42% of non-gamblers believed they had a below average chance of winning.

Given that gamblers and non-gamblers were exposed to the same instructions and game outcomes, it is interesting to note that gamblers were more realistic in their appraisal of their ability at the roulette game than non-gamblers. This shows that some non-gamblers indeed were not induced by the illusion of control in a real gambling game; in fact, the inverse (i.e. learned helplessness (Seligman, 1975)) occurred. These non-gamblers may have believed that there was some element of skill or luck involved in the game. By acknowledging that their chances were below average, these non-gamblers may have been admitting that they did not possess enough of these qualities to win; or, in other words, they had less control over the outcome. The theory that non-gamblers may have an “intrusion of reality” (Langer, 1975) and not succumb to the illusion of control in a gambling task (and thus have more accurate, objective perceptions of the game) was not supported. This is even more surprising given the ease of the task (picking a number), and its inherent probability of success (i.e. 50%). Moreover, participants, by the nature of the game, realised that they had won ten of the twenty games. Despite these cues some non-gamblers still believed their chances of success were below average. Thus there is evidence to suggest that non-gamblers do not gamble because they believe that they do not have the necessary skill. This argument is contrary to the popular notion that non-gamblers do not gamble because of the belief that it is a self-defeating task.

Although none of the gamblers, and only two of the non-gamblers, stated that the game they usually play was roulette, the extra control-inducing variable of familiarity (Langer, 1975) (i.e. familiarity with a gambling situation) may have added to the difference in perceptions between gamblers and non-gamblers. Familiarity with the situation has been shown to induce an illusion of control (e.g. Langer, 1975; Bouts & Van Avermaet, 1992), thus non gamblers’ unfamiliarity with a gambling situation may have decreased their control perceptions (relative to gamblers), and added to their pessimism.

Participants experiencing near misses and/or a win-loss sequence did not reveal more optimism with respect to the roulette game. Moreover, these inductions did not affect gamblers more than non-gamblers in terms of their specific game optimism. Therefore the causal relationship between illusion of control and optimism bias in gambling remains unknown. However, strong correlations between ratings of relative skill (at the skill game) and chances of winning in the skill game, and between ratings of relative ability (at chance game) and chances of winning in the chance game, suggest a strong relationship between control in gambling and optimism about winning.

General Gambling Comparative Optimism

In terms of general gambling optimism, gamblers were optimistically biased with respect to their chosen skill games, believing they have more skill, more successful strategies, and a higher chance of winning overall than the average gambler. Optimism bias was clearly indicated by the data, since it cannot be the case that 76.6% of gamblers have an above average chance of winning (at their skill game) while only 3.3% have a below average chance. Similarly, 75% of gamblers believed they had a higher chance than other gamblers of having a successful gambling strategy (with reference to their preferred skill game), while only 3.3% believed they had a below average chance.

Conversely, non-gamblers, with respect to their preferred skill game, were comparatively pessimistic, believing they had less skill and less chance of winning overall. They were not
necessarily *biased* in their responses, however, since the comparative referent was the average gambler.

With respect to chance games, a large percentage of gamblers were unrealistic in their outlook. At the group level, they rated their relative ability at these games as about average (i.e. accurate assessment). However, at an individual level, where optimism or pessimism bias can be identified, 23.3% of gamblers rated their ability as above average (i.e. optimism bias), while 16.7% rated their ability as below average (i.e. pessimism bias). Thus 40% of gamblers were unrealistic in their assessment of their ability at chance games. Gamblers were optimistically biased (as a group) about winning overall in their preferred chance game. 23.3% of gamblers believed that they had an above average chance of winning at these games (i.e. optimism bias evident at an individual level), while only 6.7% rated their chances as below average.

Non-gamblers, with respect to chance games, were pessimistically *biased* at a group level. At an individual level, 41% rated their ability as below average, while only 4.9% rated their ability as above average. Similarly, with respect to winning overall, 26.2% rated their chances as below average and only 4.9% their chances as above average. Thus there was clear pessimism bias, both at an individual and at a group level. Biases with respect to chance games are even more profound when it is emphasised in the questionnaire that the games are of “pure chance”. Evidently, the emphasis on chance did not persuade a large percentage of gamblers and non-gamblers to give accurate responses.

Optimism bias with respect to gambling is consistent with the general tendency of people to believe that they are more likely to experience positive events and less likely to experience negative events (Weinstein, 1980). These findings with gamblers is also consistent with other optimism bias studies using specific referent groups - for example, drivers, who believe they have more skill and are at less risk of an accident than other drivers (e.g. Svenson, 1981; Job, 1990). Whereas drivers’ overconfidence may be explained by the fact that they have never had an accident, gamblers cannot provide a similar explanation. Gambling games are structured so that the gambler is expected to lose (Walker, 1992), yet there is evidence here that gamblers believe they have a better chance than others of beating the odds (i.e. higher chance of “winning overall”); or, in other words, the objective chances of winning (which equates to negative outcomes in the long run) apply to others, but not to them. Even when they lose, their optimism may remain because they tend to explain away their losses (Gilovich, 1983) and/or have gambler’s fallacy (that is, they have already had their big loss, therefore it is unlikely to occur again soon). Experience with a negative event has been known to decrease optimism bias (Weinstein, 1982), yet it appears in gambling a big loss may maintain or even increase optimism bias (the mean biggest loss among the gamblers in the present study was $145).

There was an interesting post-hoc finding which revealed an asymmetry in gamblers’ responses to the questions “winning overall in game of skill”, and “losing overall in game of skill”. Although they believed that that they have a higher chance than other gamblers of winning, and a lower chance of losing, the strength of these responses differed significantly. Gamblers’ mean likelihood rating for “winning” was 5.02, and for “losing” it was 3.32. The extent of their optimism about winning (indicated by the difference between 5.02 and 4) was larger than their optimism about losing (indicated by the difference between 3.32 and 4). This supports the notion that gamblers “hope” to win, but realise they may lose. Their hope to win motivates them to believe that they have a higher chance than others of winning, yet the reality of losses motivates them to believe that they have (almost) the same chance as others of losing. There is an element of self-esteem maintenance here-by acknowledging that they may lose (or even expecting to
lose), this extenuates the feelings of anger and guilt when they do lose (because they were almost expecting it).

This study provides evidence for the notion that gambling is associated with undue optimism about winning. The underlying motivation behind gambling may well be winning money, and being unrealistically optimistic about positive outcomes. If the main motivations behind gambling were arousal and fun, then holding such beliefs as having more chance than the average gambler of winning appears irrelevant, if not incongruous, to their core motivations. It is unlikely that a gambler will state, “I gamble for fun, I don’t care if I win or lose, but I still think I have more chance than the average gambler of winning”. He/she is more likely to claim that they gamble to win, have strategies that can beat the system, and are therefore unrealistically optimistic over outcomes. Gamblers enter an exchange in which the odds are firmly stacked against them—the question is why they do this. There is evidence in this paper to suggest that they enter this exchange with a biased belief that they can win.
References


Adolescent understanding of the emotional and cognitive aspects of gambling: The development of a prevention strategy

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Abstract

In response to the growing popularity of gaming in Ontario Canada the authors identified the need for a prevention strategy for problem gambling. A one-hour, four part, prevention presentation was developed. The presentation was staged at 14 schools and seen by 380 students. The students were attending grade 5, 7, 9, and 11. The study involved a pre and post-test controlled experimental design that measured information retention in the following areas: knowledge of randomness and the difference between luck and skill. An additional test measured student’s range of coping ability. The four part presentation began with a mock gambling exercise, was followed by a discussion of the nature of randomness and used actors in parts three and four to model two “pathways” into problem gambling and specific ways to avoid onset of this problem. Modest but significant improvements in knowledge of randomness, luck vs. skill and coping ability resulted in the authors’ current research on a classroom based prevention curriculum.

Introduction

The province of Ontario, located in Canada has experienced a rapid increase in organized gaming since the introduction of casinos in 1994. The Ontario provincial government’s gross income from gaming during 1999-2000 was about 4.5 billion dollars. In the last seven years gaming has become more socially sanctioned and increasingly promoted through the media as an exciting entertainment option. With the recent introduction of slot machines to race tracks, and the likely
introduction of table games to the tracks in the near future, Toronto’s 5 million residents, in Canada’s largest urban center, will soon be able to reach “racinos” by public transit instead of driving one to two hours to reach a casino.

At the same time that the media is hired to promote gaming, the proliferation of gaming has become something of a political “football” that is periodically targeted by the press. In the center of this controversy are youth. In Ontario, today’s youth are the first cohort to grow up at a time where so many people are gaming. Some pundits have begun to argue that gaming is to some extent replacing over indulgence in substances as a rite of passage for youth. Macdonald & Turner (2000) found that participation in gaming by youth increases with age from 39 % in grade 5, 65% in grade 7, 80% in grade 9 and 83 % in grade 11. Research indicates that the prevalence of gambling problems amongst youth is two to four times higher than that of the adult population (AADAC, 2000;Shaffer, et al., 1997; Ferris 1996). These findings are in accord with Macdonald & Turner’s (2000) finding that 7 % of students in their Toronto study met the SOGS-RA criterion for problem gambling.

These circumstances highlight the need to develop a complete approach to safeguard Ontario’s youth from developing a range of harmful problems commonly associated with problem gambling. The first step in realizing this goal was to envision what should be included in a complete approach to prevention. A review of prevention curriculums from other provinces in Canada showed that the standard approach focuses on 3 areas of prevention: 1) raising awareness of the potential for gambling to become problematic, 2) reporting the true odds of winning and 3) naming the risks associated with over involvement. Having completed our review we were left with the question – Does this fundamental information provide sufficient protection from becoming problematically involved with gambling?

Our clinical experience and our familiarity with research and theory into the nature of problem gambling led us to suspect that the usual prevention information was requisite but insufficient to the task. Our concerns were twofold. Firstly, unless a youth has firsthand experience which brings home the reality of this problem, over involvement in gambling could be regarded as abstraction that happens to a marginalized few. Secondly, Turner (1999) contends that mistaken conceptions about the nature of random events not misunderstandings about odds are more closely associated with the etiology of problem gambling. The impetus for developing our particular prevention approach was to resolve the limitations of existing efforts in this area.

A Four-Part Design

Our initial attempt to research the effectiveness of an alternative approach to prevention involved developing an hour-long live presentation for students that included an experiential introduction to the topic, discussion of the nature of randomness, and used actors to model both the onset of problem gambling and ways to methods of prevention.

1) Experiential Introduction

Working with our clients has caused us to appreciate that emotions have a powerful influence on people while gambling. Emotional state can “swing” as rapidly as the time it takes to take a turn at roulette or play out a hand of blackjack. Rapid changes in emotional state can wreak havoc on a player’s resolve to limit expenditure or duration of play. In order to demonstrate how playing a game of risk can impact emotion and decision making, a portable carnival booth dice game was created, complete with flashing lights and gaming sound effects. Students were introduced to the
subject by participating in this simulated activity. There was a group discussion about the student’s experiences after five minutes of “wagering” the plastic poker chips that were provided.

2) Socratic Discussion of the Nature of Random Events

We maintained the interactivity of the presentation by posing a series of questions to the young audience that could be answered readily with short responses. Topics of discussion included: the influence of chaos on physical events such as throwing dice or playing roulette, what we call luck is random chance - a result of chaos, the definition and limitations of probability, random events are independent therefore unpredictable, and the various ways people are often fooled into thinking it is possible to predict random events. Our discourse with the student audience was punctuated by realistic demonstrations including: giant dice, a baseball, a replica slot machine and roulette wheel, and streams of confetti to reveal how we readily see patterns in chaos.

Modeling Two of Blaszczynski’s “Pathways”

Blaszczynski (1998) proposed an integrated model of problem gambling based on the proposition that there are three distinct “pathways” to problem gambling. In this view two of the three “pathways” are distinguished by antecedent psychological and physiological differences between groups and the third pathway is recognized by the absence of antecedents associated with problem gambling. These observations are in accord with our clinical experience and guided the development of our approach to prevention. We expected that it would be possible to include content in the prevention program that would model Pathways one and two and then model ways to minimize the possibility of “entry” into problem gambling by either route.

3) Pathway One: The “Normal Problem Gambler”

The “normal” route to problem gambling involves emotional “swings” during play becoming associated with beliefs and attitudes about how much the player can influence or predict the outcome of play. Four adolescent actors modeled this pathway during the presentation. The audience watched a teenage girl win twice in close succession on scratch lottery ticket play. Her emotional excitement resulted in grandiose notions of continued wins to finance increasingly elaborate plans for a prom night celebration. As the scene concludes the girl has lost her winnings and alienated her friends by becoming indebted in her pursuit to win again.

4) Pathway Two: The Psychologically Vulnerable Gambler

This pathway describes people who for a variety of reasons have difficulty coping with stress. This difficulty is often associated with “feelings of low self esteem, insecurity or a sense of rejection”. Three adolescent actors modeled this pathway during the presentation. The audience watched a teenage boy express his insecurity and anger over not making the line-up for his school’s baseball team. He retaliates by betting against his team and succeeds in alienating a close friend who is on the team. As the scene concludes the boy and his partner plan to steal money from the boy’s mother to finance more gambling.

Modeling Preventative Solutions

Parts three and four of the presentation each included four ways to avoid the difficulties portrayed in the “opening” version of scene.
Pathway One: Self Monitoring Questions

After viewing the teenage girl getting into trouble as a result of her expectations becoming skewed by early wins, the audience was reminded of the influence of emotions upon decision-making in the action of gambling. The actors displayed signs with four questions:

1. How Much Money Am I Really Winning?
2. Can I Really Count on Gambling as a Way to Make Money?
3. When I’m on a Losing Streak Am I Really Due for a Win?
4. Is Gambling Causing Any Problems in My Life?

The audience was advised that each of the questions is associated with an alternate ending to the scene they have just seen. After choosing one of the four, the audience observed the teenage girl avoiding problematic gambling, by using the question to examine her assumptions and circumstances.

Pathway Two: Coping Skills

After viewing the teenage boy getting into trouble, resulting from the emotional stress of rejection; the audience was encouraged to identify why the boy got into trouble. The actors displayed four signs, each with a different coping skill on it:

1. Better Communication
2. Problem Solving
3. Decision Making
4. (Asking the question) Am I Being Too Hard on Myself?

The audience was advised that each coping skill was associated with an alternate ending to the scene they had just seen. After choosing one of the four, the audience observed the teenage boy using the selected coping skill to deal with not making the team.

Sample

Three hundred and eighty students from 14 schools, in grades 5, 7, 9 and 11 participated in this experimentally controlled pre/post test of concepts and information included in the one hour prevention presentation.

Results

Students were asked to provide feedback on specific aspects of the presentation and completed post-tests to determine any change from pre-testing in the following areas:

- Random events knowledge
- Ratio of luck vs. skill in gambling activities
- Variety of coping responses to various problems
- Rated effectiveness of coping responses
The majority of the students liked the presentation. Their approval rating for the various parts of the presentation ranged from 80% to 87.6%.

Students in the experimental group improved significantly in their understanding of the nature of random events. The experimental group improved by 6% vs. 2% improvement by the control group (p < .01).
Figure 3. Ratio and Skill and Luck in Gambling Activities: Scores less than 1 indicate that luck is more important than skill.

Students in the experimental group improved significantly in their understanding of the role of skill vs. luck in gambling and non-gambling activities ($F(1,255) = 6.0, p < .01$).
Figure 4. Standardised number of different coping responses.

The measure of students’ coping skills was a list of problematic situations in the domains of family, friends and school. Students were asked to “write down some of the things that you would do to help you deal with the situation or change your mood” Responses were rated in two ways: 1) variety of different coping responses to a given problem, and 2) effectiveness of responses in addressing a given problem. The experimental group improved significantly in the variety of different coping responses (F (1,323) = 4.62, p < .05).

The experimental group did not improve significantly in rated effectiveness of their responses to the problematic situations. Age and gender were controlled in the covariance analysis. Control and experimental groups were selected randomly. However pretest differences between groups resulted in relatively modest improvements in the experimental group.
Discussion

The results of this initial inquiry into the effectiveness of our alternative approach to problem gambling prevention in youth are encouraging. The prevention program was well received by the students who participated in the study. Positive ratings of the program make it more likely that students will pay attention and therefore learn and remember the information. We were successful in our attempt to teach students about the unpredictable nature and independence of random events. Students also improved their understanding of the limitations of skill in games of chance. Our analysis also suggests that to some extent we improved the coping skills of the students who participated in the program.

Our results indicate that a complete approach to prevention would include this four-part design that incorporates experiential and interactive content, and highlights the role of emotion, cognition and coping in gaming and problem gambling. The effect of the presentation within this controlled design was diminished by baseline differences between groups in their understanding of randomness, the role of skill vs. luck in gambling and level of coping ability. Notwithstanding this result we questioned how robust a protective effect could be expected from a single one-hour presentation. Our long-range goal with this research is to develop a comprehensive prevention package that will be incorporated into Ontario’s school curriculum. This goal has shaped the design of our current research project “Life Skills, Mathematical Reasoning and Critical Thinking: Curriculum for the Prevention of Problem Gambling” Upon completion of our initial effort we concluded that two modifications of the prevention package were required. A more extensive “package” would be needed to enhance the protective effect.

Retention of a more extensive package would require that it be presented sequentially over a number of occasions. This realization led us to conclude that we should work towards developing a prevention curriculum that could be delivered by teachers in the classroom.

Research In Progress

During the process of thinking through the design of “Life Skill, Mathematical Reasoning and Critical Thinking” it was apparent that in developing the new classroom based curriculum we did not want to abandon any of guiding principles that had informed the development of our live presentation. Interactivity and the use of actors to model problem gambling and ways to avoid it, were a large part of what made the first research project palatable to our adolescent audience. While wanting to preserve these aspects, more extensive content was required. The decision was made to develop an interactive CD-ROM to maintain the interactivity and allow for the inclusion of the contribution of the actors as well as a “Teacher’s Guide “ to support 8 lesson plans.

CD-ROM

The CD-ROM begins with an animated mock gambling game that is interactive. To highlight how winning and losing can have an emotional and cognitive impact, the game begins by asking the user to imagine that money saved through employment is being risked. At the conclusion of the game the user is asked if winning or losing caused a desire to continue wagering. The user can then access short lessons on randomness, organized under various headings and provided by the animated character Dr. Chaos. Retention of information is reinforced by the user playing an animated game show where the questions are about the nature of randomness. The balance of the content on the CD-ROM is similar to the live presentation but has additional content. CD-ROM technology allows for the inclusion of text while the viewer watches video & audio in a smaller screen within the usual computer monitor screen. Inclusion of text is used to
reinforce why the teenaged actors are getting into trouble with gambling during the initial scenes that model pathways 1 and 2. Text also supports each alternate ending for both pathways thereby highlighting the benefits of using self-monitoring questions to prevent “normal” problem gambling and coping skills to prevent problem gambling associated with psychological vulnerability. This format also makes it easy for the user to select to view each of the 4 alternate endings for pathway 1 and 2, or view any of the endings using self-monitoring questions or coping skills repeatedly to increase comprehension.

Two new segments have been developed using actors and filmed on videotape. These are a roundtable discussion between 3 youth and a clinician and a recreation of a clinical interview. The roundtable discussion supports the pathway 2 oriented video content where psychological vulnerability and coping skills are modeled. During the roundtable discussion the relationship between stress, emotional state and coping are reviewed as a teenage boy expresses his concern about his brother’s gambling. The rudiments of problem solving, decision-making and proactive coping are discussed through question and answer dialogue between the youth and the counsellor. The purpose of the “clinical segment” is twofold. Viewing the plight of the engaging young actor provides a revealing vicarious experience of what it is like to be largely consumed by problem gambling. Midway through the segment the counsellor begins to discuss a practical strategy for preventing the onset of problem gambling. The client expresses his fear that his brother may stubbornly follow in his “footsteps” into problem gambling. The counsellor responds to this concern by reviewing the processes of limit setting and self-monitoring. Finally he provides 6 fundamental self-monitoring questions. This segment provides a generic clinical profile of problem gambling and demonstrates skills that, while generally applicable, are especially pertinent to pathway one problem gambling.

Teacher’s Guide & Lessons Plans

The teachers guide serves as the primary resource for the 8 one-half hour lesson plans that make up the prevention curriculum. The guide is organized into three sections outlined below:

1) Understanding Randomness

This section of the teacher’s guide is subdivided into four sections. The first section contrasts the concepts of luck vs. skill. The second section explains that what we call luck is actually randomness and describes randomness. The third section outlines common misunderstandings or “myths” about winning as they relate to randomness. The final section explains how misunderstandings about randomness can contribute to the onset of problem gambling through cognitive and emotional influences.

2) Understanding Problem Gambling and Prevention Methods

This section of the teacher’s guide is subdivided into two sections. The first section explains the full continuum of effects from problem gambling, highlighting how relationships with family, friends and employers can be strained or lost. This section also outlines the psychological situation of the problem gambler. The second section describes the process of limit setting, ways to take a “time out” from being emotionally and cognitively involved in the action of gambling and lists several self-directed questions that can be utilized to self-monitor for indications of any transition towards problem gambling.

3) Understanding Coping Skills

This section of the teacher’s guide is subdivided into three sections, preceded by an introduction that highlights the utility of developing coping skills as a means to self-regulate emotional
reactions to stress. Following the introduction is a section on skills development that includes such topics as problem solving and decision-making. In the second section students are introduced to the concept of proactive coping, a way to anticipate changes in circumstances that can be addressed to avoid having to cope with “full blown” problems. The final section discusses ways a person can encourage a sense of their own self-efficacy.

The 8 lesson plans that guide teaching the prevention curriculum are organized under the following headings.

- Objectives:
- Core Concepts:
- Resources:
- Suggested Classroom Exercises

After having this phase of our research positively reviewed by two school boards, we are currently in the process of recruiting schools to participate in this pilot test of our classroom based prevention curriculum.
References


Comparative analysis of gambling impact assessment policies in Australia

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Abstract
Impact assessments (IA) are rapidly being adopted as a policy tool in a wide range of government portfolios, such as the environment, and most recently in ministries responsible for gambling. Ostensibly, they form part of the state’s regulatory regimes with the objective of balancing the positive and negative effects of government and industry policies on the general public. As control of the gambling sector is a state responsibility in Australia, there are no uniform national approaches to impact assessments and, indeed, only four states have any such requirements. Queensland, Victoria, New South Wales and the Australian Capital Territory impose impact assessment obligations on gambling operators. The provisions and effectiveness of each State and Territory’s policy framework vary considerably. This article examines their differences and some of their strengths and weaknesses. Moreover, the usefulness of impact assessments generally as part of government reform agendas, are briefly analysed in the context of Australia’s capitalist democratic structures and processes.

Introduction
Growing community concern about the private and social costs of gambling has compelled state governments to introduce responsible gambling legislation in recent years. Impact assessment regulations are a key component of gaming developments in Victoria, New South Wales and Queensland. This mechanism is a centrepiece of governments’ community consultation and public interest initiatives in relation to gaming.

The value or suitability of impact assessment for achieving those objectives in gaming regulation has not been critically examined to date. Indeed, impact assessment as a public administration and planning tool has received little independent analysis in Australia. For example, there have not been any articles dealing with impact assessment in the Australian Journal of Public
Administration over the last decade. This paper is a preliminary contribution to the critique of gambling impact assessment.

The Victorian Local Governance Association (VLGA) has been actively addressing the impact of gambling on local communities for a number of years. Key components of those efforts have been the establishment of a Local Government Working Group on Gambling (LGWGOG), the publication of the *Gambling Research Newsletter*, and the commissioning of gambling research including the development by Dr James Doughney of the Pokies Application Response Kit (PARK – formerly LAPIST).

This paper stems from a VLGA research project conducted by the Australian Institute for Gambling Research (University of Western Sydney) and the Workplace Studies Centre (Victoria University). The project was concerned with the development of a methodology for the assessment of gambling impacts at the local level.

**Gambling impact assessment regulations**

At present impact assessment regulations are characterised by quasi-judicial process to the extent that a third party (that is a magistrate’s court or statutory body rather than government or industry) determines the application. However, unlike the judicial process stringent laws of evidence do not bind decision-making bodies. Significantly, this legislation is primarily directed at the impact of one particular type of gambling, namely gaming machines. Legislative framework complexities vary between the states. State legislation and determining bodies are outlined below.

<table>
<thead>
<tr>
<th>Relevant Legislation</th>
<th>Determining Body</th>
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</thead>
<tbody>
<tr>
<td>NSW Registered Clubs Act 1976</td>
<td>Licensing Court of New South Wales</td>
</tr>
<tr>
<td>VIC Gaming Machine Control Act 1991</td>
<td>Victorian Casino and Gaming Authority</td>
</tr>
<tr>
<td>QLD Gaming Machine Act 1991</td>
<td>Queensland Gaming Commission</td>
</tr>
</tbody>
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It is important to note that in NSW the Act more narrowly calls for a *social* impact assessment. Economic matters are considered in separate subsections of the Act dealing with undue competition and economic waste (LC, 2001, 37). Other sub-sections also deal with the establishment of ‘genuine and substantial need’ for the premises, disturbance to quiet and good order in the neighbourhood, a public interest test and harm minimisation objectives (*NSW Registered Clubs Act 1976*). The assessment is required for the endorsement of a certificate of registration for the premises in which machines will be kept. An application must then be made to the Liquor Administration Board for authorisation to keep gaming machines. In other states economic, social and community impacts are considered under the same sections.

The general objective of the impact assessment frameworks in each state is to address the economic and social *benefit* to the community – net or on balance. A range of questions arise from this approach, particularly in relation to definitions of ‘benefit’ and ‘community’ - both notions remain contentious. Impact studies necessarily make subjective assumptions about these and other matters, though not all acknowledge them.

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16 I would like to acknowledge and thank the other research team members who worked on this project including: Dr James Doughney, Genevieve Sinclair, Professor Jan McMillen and Kell Tremayne.
Guidelines have been formulated in Victoria and Queensland, though legislation in all the states contain open-ended clauses that allow the determining body to request further information beyond what applicants may have supplied. The Victorian Casino and Gaming Authority (VCGA) has designated submission forms that applicants and local councils submissions must follow. The Queensland Gaming Commission (QGC) provides the most comprehensive guidelines that are particularly detailed in relation to information on venues, community effects and harm minimisation strategies (QGC, 2001). Issues about how an application will affect the feel of the community are also emphasised. The QGC importantly requires an explicit statement on methodological assumptions underpinning the assessment research and submission. Another key difference between the state apparatus’ is the conduct of open hearings in Victoria and NSW, while Queensland’s hearing and decisions are closed. This status effectively precludes any case analyses of the Queensland assessment framework.

The dimensions of gambling impacts that must be assessed under the different legislation include:

- Venue information;
- Employment/business effects;
- Problem gambling;
- Community effects; and
- Responsible gambling and harm minimisation strategies.

There are provisions for community input into the assessment process in each state. The procedures to facilitate local government input into the assessment process are fairly similar across the jurisdictions. In each case local government is allowed a month or four weeks to compile a responding submission involving quite extensive information. Minimal consideration is given to the diverse resources of local municipalities to meet these needs. More affluent local authorities are likely to have greater capacity for collecting data and compiling responses than others. This is significant given the increasing concern about high machine densities and expenditure in socially and economically disadvantaged areas. The input of support services in hearings has been crucial, however, in these communities their resources are also stretched.

**Victorian Case Study – Roxburgh Park Hotel**

In this case Roxburgh Park Hotel Pty Ltd applied to the VCGA for approval of the premises and to operate 80 electronic gaming machines. A Queen’s Counsel represented the applicant and those appearing for their case included a demographical and marketing analyst, a policy consultant, a town planner, a valuer, and two members of the Roxburgh Park Residents Association. The City of Hume where the proposal was to be located lodged a submission objecting to the application. An economist, a community service manager, a local reverend, a personal/financial counsellor, and a representative of an Islamic association and local resident provided testimony on behalf of the City of Hume. The VLGA also assisted supported the Council’s case.

This hearing involved a range of debates around definitions, measurement of impacts and data availability. Specific issues addressed included:

- Catchment area/local community definitions;
- Socio-economic status of the area;
- Economic arguments over net impact (including LAPIST/PARK);
- Definitions and measurement of community ‘well-being’;
Differing economic standpoints produced divergent ‘net’ results. The VCGA observed that the Productivity Commission’s estimated range of net effects of gambling for the nation was somewhere between a cost of $1.2 billion and a benefit of $4.3 billion. This included a consumer surplus component (2001, 25). The methods and feasibility of quantifying intangible costs and benefits remain contentious, particularly around issues of consumer surplus, market rationality, and national development indicators, for example, Gross Domestic Product versus Genuine Progress Indicators. The VCGA noted: “… the use of GDP growth as a measure of wellbeing is rejected by other reputable economists on the ground that GDP fails to balance the benefits and costs of economic growth” (VCGA, 2001, 25; also Hamilton, 1997). In this case the Authority defined well-being as “a person’s happiness, health and prosperity” (VCGA, 2001, 28).

On hearing all the arguments, the Authority was not satisfied that “… the net economic and social impact of approval will not be detrimental to the well-being of the community or the municipal district…” (VCGA, 2001, 36 emphasis added). In making their decision a number of reasons were provided. The Authority had “regard to the relevant key findings of the Productivity Commission”, particularly in relation to gaming machine accessibility and prevalence of problem gambling (VCGA, 2001, 25). This was of some concern given the proposal’s proximity to a neighbouring capped region. In relation to the opposing economic arguments, the Authority felt that “one exaggerates the benefits the other ignores the benefits” (VCGA, 2001, 28). Overall, they were unconvinced by the applicant’s estimates of economic benefit. Arguably the provision of a counter-argument to the applicant’s economic evidence was at least as important, as whether one economic case or the other proved more persuasive. The lower socio-economic status of the region and the evidence from ‘the coalface’ on problem gambling experiences and service demand seemed to tip the decision against the application (VCGA, 2001, 27).

NSW Case Study – Canterbury Bulldogs

The Bulldogs case involved a significantly larger number of gaming machines (600-800) that were to part of a $110 million complex at Liverpool. This application was also presented by a Queens Council and involved evidence from a planning consultant, a social impact analyst (KPMG), nineteen ‘key advisers’, and the Mayor of Liverpool. The Liverpool City Council was also an investor in the proposal. The objectors in this case were the Director of Liquor and Gaming, nearby registered clubs and hotels (the hotels withdrew early), and local residents. The Director called on several expert witnesses including Jan McMillen (AIGR) and Clive Allcock (University of Sydney).

The points of contention in the Bulldogs case involved similar issues to those debated in the Roxburgh Park case, that is, definitions of catchment and community areas, problem gambling prevalence and services, socio-economic disadvantage in the region, and accord given to the Productivity Commission’s inquiry into gambling. Additional matters raised included the efficacy of responsible gambling and harm minimisation strategies, the extent to which people with culturally and linguistically diverse backgrounds were included in the SIA, and the likelihood of money and resources being diverted away from the community.

The Licencing Court determined that on balance “there would be significant social damage (impact) as against a moderate economic benefit to the local community” (LC, 2001, 93). The
deciding factors in this judgement were the high level of socio-economic disadvantage in the area, particularly in the core area around the proposed venue. Link between gaming machine accessibility and problem gambling were considered to be especially problematic in this socio-economic context. The Court also handed down an important statement on the issue of harm minimisation strategies:

“… we are satisfied that the whole of the proposal with its 600 machines in attractive, modern premises will attract problem gamblers and others who are on the verge of becoming problem gamblers. We do not believe that any harm minimisation strategies adopted by the club at Liverpool will overcome this probability” (LC, 2001, p 101).

The stretched resources of existing support services was therefore a significant obstacle to approval (LC, 2001, p 91). Finally, the Court determined that the net economic and social benefits flowing from the proposal would be marginal at best.

Case comparison

A range of similarities is notable between the two cases. The resources, length and public cost entailed in these quasi-judicial hearings are significant and should be evaluated against other criteria and forms of effective decision-making. Many of the issues under contention were similar and arguably could be resolved by clearer social policies and guidelines. Determinations were hampered in each case by the requirement for local gambling data and research that simply does not exist in many jurisdictions. The crucial need for this research was demonstrated in the NSW case by the use of the Tremayne report (2000) to identify correlations between areas of socio-economic disadvantage and gaming machine density and expenditure (LC, 2001, 216, 81). An important aspect of the proceedings was the provision of qualitative information on local conditions. However the weighting of quantitative and qualitative data was undertaken on an ad hoc basis. In these cases qualitative data appeared to be given due and equal consideration.

Both cases involved the presentation of complex economic arguments for and/or against the application with none of the submission being recognised as convincing. Nonetheless, the lower socio-economic context in both cases was a crucial factor in the determinations. The value of harm minimisation strategies in protecting communities at risk of problem gambling was questioned, and indeed rejected outright in New South Wales. This is noteworthy given the substantial attention these programs have received from government, industry and researchers in recent times, with the intention of protecting precisely those communities.

Some key differences are also observable between the two cases. The scope and size of the applications varied considerably, especially in terms of machine numbers involved. This is important given the similarities mentioned above. Greater emphasis was given to social impacts in the Bulldogs hearing. The Court adopted a respectful, yet independent view, of the Productivity Commission’s study stating “…many of the report’s conclusions are tentative … [and] it is only a report by a Commission and expresses the author’s views” (LC, 2001, p 58). The VCGA did not state its reservations as plainly, nor did it rigidly apply the findings.

The objectors involved emphasised the divergent nature of each hearing; the community sector and local government drove the Victorian case, whilst the NSW case reflected the interests of competing industry sectors. Hence, the role of the local government varied between the two cases, an objector in the former and an investor/supporter in the latter. The Victorian situation is unique
in Australia, if not internationally, with respect to the highly active and community-based role of the VLGA. Their support and resources were crucial to the success of local objections to the proposal.

Do the different state frameworks produce different outcomes overall? It is not possible to obtain data on case results in all of the states due to disclosure provisions. The VCGA is the most open about this information by posting the relevant data and decisions on its website. In Victoria there have been 21 applications resulting in 10 approvals, 4 refusals, and 7 reserved decisions (http://www.vcga.vic.gov.au). Data is not readily accessible in NSW, though the Bulldogs case has been the only landmark hearing to date. Queensland data is not disclosed, though they have processed a significantly higher proportion of cases than the other two states. There has been a correspondingly higher level of refusals and appeals arising from the Queensland assessment process.

What are the marks of successful impact assessment? In relation to gambling impact assessment this paper focuses on four main standards of measure: community benefit, public interest, efficiency and democratic process.

On the first question the evaluation of community well being, as discussed above, is problematic. As impact assessment procedures are a relatively recent introduction in gambling regulation, there has been insufficient time to appraise the community impacts of approved applications. Moreover there is no legislative requirement to review or monitor the effects of these decisions, and local governments are unlikely to have the resources for ongoing inquiries. So while statutory bodies make decisions about anticipated impacts there is no responsibility to follow up on the actual impacts, or any authority to redress what might prove to be incorrect decisions. The judgements of these bodies therefore play a powerful role in shaping local leisure environments. Whether their efforts translate into overall community benefit is not yet clear.

At present those submitting and hearing impact assessment applications are expected to participate in a regulatory process without recourse to a rigorous body of research on local gaming impacts. This situation varies between the states, with Victoria ahead on volume and scope of coverage. In light of public disquiet over the negative effects of gambling, the National Competition Council (NCC) questioned whether the ‘precautionary principle’ should be adopted in gambling regulation:

“... the precautionary principle states that where the costs of inaction are high and likely irreversible, then the lack of conclusive technical evidence is not a reason for doing nothing” (NCC, 2000b, p24).

This tenet underpins economically and ecologically sustainable development and has equal applicability to community impact assessment frameworks and licensing decisions. Some of the state frameworks place considerable burden on local governments and communities to prove detriment to community well being, while industry is expected to prove benefit. It is worth asking whether the two cases, particularly Roxburgh Park Hotel might have had different outcomes if support services had been unable to provide evidence. The uneven emphasis and resources of the contesting parties to produce this information appears to run counter to the NCC’s public interest test.

Gambling impact assessment regulations and hearings involve the use of significant public resources at both the state and local levels. Being a quasi-judicial process, judgements may also be appealed adding further costs to the public purse. In Queensland, for example, where the
highest proportion of applications have been rejected, a number of appeals have been lodged. In that state many applications are therefore still pending. In New South Wales the Bulldogs case involved 13 days of oral evidence, 110 exhibits, and court visits to sites. Degrees of efficiency vary between the states; however, the process appears at present to be cumbersome and expensive.

Genuine and representative public participation is generally regarded as the cornerstone upon which democratic practices are based. Impact assessment legislation has been introduced with precisely this objective in mind – to ensure that local voices and experiences are considered in the decision-making process. The level of community input into application hearings has certainly been improved by these amendments though it remains somewhat minimal. For instance, the timeframe for local government responses to applications within 28-31 days is an obvious hindrance to in-depth responses and wider involvement. Community members and local residents are not required to take any part in decision-making. The expense and intimidation of a quasi-judicial process may also discourage local input independent from, or critical of, local government responses or non-responses. Further, where a community member or group might choose to oppose an application, they face a well-financed and professional lobby on behalf of the applicant. As the Roxburgh Park case illustrated, a concerted collaborative effort was required to influence the decision in favour of the objectors. This is very much a top-down regime that inevitably privileges better-resourced and organised groups.

On these criteria, there appears to be plenty of room for improvement of impact assessment regimes.

Issues

The first issue relates to the value placed on different forms of knowledge (for example, official statistics and economic modelling compared to life experience) and the methods used to collect them (for example, quantitative and qualitative).

In a Victorian study, Arthur Andersen suggested that community perceptions were primarily driven by: strong interest groups; churches; government; and the media. They concluded that no matter how strongly views may be held:

“… community perceptions and opinions about public issues like gaming are often not based on detailed factual knowledge. This has to be taken into account when considering what weight to attach to the views about costs and benefits obtained in community surveys (Arthur Andersen, 1997,p 6).”

This overly structuralist research approach avoids discussion of arguably the most important driver of community perceptions, that is, the lived experiences of residents and stakeholders within that community. In this report the legitimacy of views based on ‘grounded’ knowledge are singled out for critical scrutiny, whereas ‘detailed factual’ knowledge is described as a measure against which the former gains validity. Indeed, all research data and methods should be subject to critical and independent examination. The debates surrounding this contested terrain strikes at the heart of theories of power and knowledge. Much of the literature reviewed here shuns these issues a mere ‘academic exercise.’ These matters are, however, crucial to what forms of knowledge have credibility in policy decision-making processes and licensing judgements. They also have far wider implications for public debate and analysis of the role of gambling in Australian society.
The cost-benefit analysis paradigm underpinning impact assessment models remains problematic. The Commonwealth Dept of Finance (DOF, 1997, 82-85) identified seven key limitations and criticisms:

- False accuracy;
- Self-serving analyses;
- Infinite values (intangibles);
- Complexity (onerous);
- Equity overlooked (ability to pay);
- Unresolved theoretical issues (risk, distributional effects, shadow pricing); AND
- Method (definitions, assumptions, values).

O’Fairchaelalaigh suggests there are a range of other models that may potentially facilitate greater local participation and control over the impacts of industry on community well being (1999). In the mining industry, for example, negotiated models of impact assessment, though not without flaws, allow far more scope for the involvement of local residents, particularly in the settlement of compensation for the depletion of local resources. By taking the process to the community, the costs of assessing impacts are also borne more proportionally by the industry that stands to profit from the venture. Moreover, this model of impact assessment takes a longer-term view of impact assessment as an ongoing process in recognition that effects may change, intensify or ameliorate over time. The current frameworks used to assess gambling impacts are based primarily on snapshot information and do not include any monitoring mechanisms as mentioned above.

To date local area representatives have not had the opportunity to determine their own gambling landscape. As the level of government closest to the people, questions about the devolution of decision-making power to local governments may warrant revisiting. The principle of local determination in relation to gambling has been recognised in the establishment of local consultative committees to decide on the distribution of community funds in Queensland and NSW. It is worth asking: if distributions can be decided at the local level, might this provide an alternative framework for determining the desirability of increases in machine numbers. Indeed local planning and control is commonplace in other industries.

**Conclusion**

The frameworks currently in use have been developed with limited reference to impact assessment best practice and no dedicated or systematic research has been undertaken into the formulation of a community impact assessment model for the gambling industry (Mohr, 1992; Lichfield 1996.) For example, the quasi-judicial context in which impact assessments are applied in the gambling sector represents only one specific type of evaluation - other impact assessment approaches have not been investigated. Moreover, there are no independent auditing procedures in place to review the effectiveness of the existing frameworks.

Broader questions also need to be examined in relation to the political economy of gambling. Increased commercialisation of gambling has corresponded with a decline in community-based and controlled gambling cultures and practices (Eadington, 1987; AIGR, 1999; Reith, 1999). This has involved a dramatic shift in patterns of ownership and control over gambling. In recognising the social and historical contexts of gambling and problem gambling in Australian society, we inevitably must confront issues of power, wealth and ideology as they are practiced in a capitalist democracy. As the case studies indicate, often unequally positioned players contest the shaping of local gambling landscapes. This struggle involves actors both with and beyond the domains of
government. The participation of local communities, particularly the more socially and economically disadvantaged of them, is constrained by a lack of resources.

To return to the beginning, notwithstanding some difficulties, the VLGA’s work as a facilitator and mobiliser of community voices on gambling issues has been groundbreaking. It is a model for community action and democracy that warrants greater attention from local governments and regulatory bodies in other jurisdictions. Impact assessment and government regulation generally is but one front on which democracy and social justice are contested – the other fronts on which the implications of gambling are being struggled over await critical examination.
References


Predicting problem gambling among poker machine players from coping styles and motivational factors

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Abstract
This study explored (a) whether gamblers’ coping styles could successfully predict problem gambling within a poker machine playing population across Victoria; and (b) whether adding motivational factors to the prediction model comprising coping style variables could improve the prediction of problem gambling. One hundred eighty-nine poker machine gamblers (108 males, 81 females) aged between 18 and 65 years (Male M = 33.13, SD = 11.32; females M = 34.08, SD = 13.58) completed questionnaires comprising demographic questions, a version of the South Oaks Gambling Screen (Lesieur & Blume, 1993), the Coping Scale for Adults (Frydenberg & Lewis, 1993), and the Maroondah Assessment Profile for Problem Gambling (G-MAP) (Loughnan, Pierce, & Sagris-Desmond, 1999). Multiple regression analyses revealed that sex, marital and occupational status, and four coping styles significantly predicted problem gambling by accounting for 28.1% of the variance. The addition of motivational factors significantly added to the prediction of problem gambling. Sex and occupational status, coping styles, when combined with five motivation variables (beliefs about winning, feelings, situations, attitudes to self & social) accounted for 50.9% of the variance. These results highlight the importance of considering demographics, coping styles and motivational factors for the early detection of problem gambling.

Introduction
Pathological gambling shares many of the same features with alcoholism including withdrawal symptoms, dependency, loss of control and mood and behavioural changes (Blaszczynski, Winter & McConaghy, 1986; Blume, 1987). Further, McCormick (1987) asserts that pathological gamblers tend to have personality dimensions that resemble those of alcoholics; therefore it may
be beneficial to explore variables, which have been found to contribute to the prediction of alcoholism, to observe whether they can be used to predict problem gambling on poker machines.

One area that has gained support over the last 15 years is that of predicting alcoholism and other substance abuse disorders from coping styles. For example, the amount and frequency of alcohol intake could be successfully predicted by determining individuals coping styles (Bonin, McCreary, & Sadava, 2000; McKee, Hinson, Wall, & Spriel, 1998). Maisto, Connors and Zywiak (2000) suggest that the less an individual uses productive coping skills the more likely they will be to use substances to cope. Johnson and Pandina (2000) argue that negative (non-productive) and positive (productive) coping styles are important variables when trying to explain problem drinking behaviours.

Of the limited research that has been conducted on coping styles in relation to pathological gambling it has been found that individuals who favour a non-productive coping style may initially use poker machine gambling as a way to solve their problems. However, it is not long until this initial harmless and happy symbiosis creates feelings of emptiness and depression that reinforces the need for the symbiotic relationship to the poker machine. This in turn creates a vicious cycle and problem gambling behaviours (Haustein & Schurgers, 1992).

It has been found that pathological gambling is in part due to a maladaptive coping strategy (Blaszczynski, McConaghy & Frankova, 1990; Jacobs, 1986;) A case study by Blaszczynski, Hyde and Sandanam (1991) showed that in a specific case involving a 23 year old male who had previously suffered head injuries and in turn suffered from social isolation and boredom, later developed a pathological gambling disorder established as a result of a maladaptive coping strategy.

Those who are predisposed to a high use of a non-productive coping style, or low use of a productive style may be at risk of developing gambling problems. In research using 154 homeless U.S. military veterans conducted by Castellani, Wootton, Rugle, Wedgeworth, Prabucki and Olson (1996) pathological gamblers were shown to demonstrate higher levels of poor coping than individuals without a gambling problem.

Although coping can be measured in many different ways and by using different measures, some of which look at problem and emotion focused coping, while others look at positive and negative coping (Carver, Scheier, & Weintraub, 1989). The Adult Coping Scale (ACS-SF) is purported to be the only scale that successfully measures the coping dimensions ‘Independently Dealing with the Problem’, ‘Non-Productive’, ‘Sharing’ and ‘Optimism’ (Frydenberg & Lewis, 1997).

The present study is based on the assumption that an individual’s predisposition to particular coping styles will influence the coping strategies enforced when an individual is exposed to triggering factors or experiences problems in their lives, with the strategies enforced being an attempt to restore equilibrium to an individual’s life.

Although the strategies enforced to cope with stressful situations vary for different situations, Carver and Scheier (1994) maintain that over time individuals develop habitual ways of dealing with stress, and that these coping styles effect the individual’s responses to similar situations in the future. Further, students tend to deal with problems by using a hierarchy of favoured coping styles (Frydenberg & Lewis, 1994). Such research has shown that individuals tend to reapply a limited set of learned coping strategies.
The aim of the present study was to explore whether a model containing defined coping styles could be used to successfully predict possible problem gamblers, within a poker machine playing population across Victoria. The level of individuals’ problem gambling behaviour will be assessed by the South Oaks Gambling Screen (SOGS) (Lesieur & Blume, 1993).

Although knowing an individual’s predisposition to particular coping styles will help predicting problem gambling, some research suggests claim that it is motivational factors that influence an individual’s involvement in gambling activities (Browne, 1989; Chantal, Vallerand, & Vallieres, 1995). Therefore, the information on triggering motivational factors that lead people to gamble will further add to prediction of problem gambling.

The G-MAP is used in a clinical, counselling and research setting to provide insight into the reasons behind individuals’ problem gambling behaviours. Although the instrument was developed using a problem gambling population for use with anyone with a mild, moderate or severe gambling problem the scale also serves as a relevant tool to identify groups of motivational factors that influence individuals’ gambling behaviours in a social gambling population. Therefore for the purpose of the present study the G-MAP will be used to identify individuals’ motivations for poker machine gambling. According to the G-MAP (Loughnan, Pierce & Sarris-Desmond, 1999) individual’s motivations for gambling can be split into five broad groups. These groups are ‘Beliefs about Winning’, ‘Feelings’, ‘Situations’, ‘and Attitudes to Self ‘and’ Social’.

Many people gamble with the belief that they have control over the outcome of random events (Langer, 1975). Illusion of control beliefs is a reliable predictor of problem gambling (Moore & Ohtsuka, 1999). For example, beliefs about winning played a large role in Bingo players who followed feelings and hunches, which they believed would increase their chances of winning (King, 1990). Some gamblers believe their skill will increase their potential to win (Dumont & Ladouceur, 1990; Moore & Ohtsuka, 1997; 1999a), while some believe in a particular betting system (Moore & Ohtsuka, 1997; 1999a).

Regarding ‘feelings’, pathological gamblers have been clinically described as easily bored (Taber, 1985; Brown, 1986; McCormick, 1987; Castellani & Rugle, 1995). Individuals participating in a study conducted by Blaszczynski, Wilson and McConaghy (1986) reported that many gamblers do so in order to reduce their dysphoric mood, and to cheer themselves up.

Individuals who regularly play poker machines experience higher levels of excitement and arousal than those individuals who play less frequently (Dickerson & Adcock, 1987), which would explain why feelings such as arousal and excitement are often believed to be motivating factors of gambling behaviour (Anderson & Brown, 1987; Dickerson, Hinchy, England, Fabre & Cunningham, 1992). It has been shown that some gamblers report experiencing good feelings, even euphoria while gambling (McCormick, 1987).

A gambler’s ‘situation’ (as measured by G-MAP) may also be a relevant motivational factor. Results from a therapy project involving the study of 60 pathological gamblers over three years showed that half of the individual’s involved in the project had experienced problems of separation and loss, while over a third of individuals had formed a marriage or other close relationship at the same time as their gambling career had commenced (Haustein & Schurgers, 1992). Other factors that precipitate problem gambling are the death of a family member or birth of a child (Bolen & Boyd, 1968).

Whitman-Raymond (1988) views pathological gambling as a defense mechanism, believing that some individuals who have experienced unresolved previous losses gamble excessively to try to
Problem gambling behaviours are often a reflection of an individual’s ‘attitudes to self’ (another motivational factor measured by G-MAP), stemming from a low self image, feelings of inferiority (McCormick, 1987; Jacobs, 1988), or the belief that things have been bad in the past, therefore will be bad in the future (McCormick, 1987). For some gamblers, the experience of unavoidable loss that accompanies gambling serves a way to punish themselves (Taber, McCormick & Ramirez, 1987).

The final motivational group assessed by G-MAP is ‘social’ factors. An important motivation for gambling, which has been reported, is the desire to participate in a social activity (Dumont & Ladouceur, 1990). Graham and Lowenfeld (1986) suggest that there is a need to place more attention on social factors within problem gambling research.

It would appear that coping and motivational factors are both important and should be combined to explore their joint effectiveness in the prediction of problem gambling. This was examined in the present study that explored whether problem gambling could be better predicted if the model contained both coping styles and different groupings of motivational factors, which may influence poker machine gambling.

Firstly, it was hypothesised that the level of problem gambling (measured by the SOGS) can be predicted by a participant’s gender, marital and occupational status, along with their use of different coping styles (measured by the ACS-SF).

Secondly, it was hypothesised that motivational factors (measured by the G-MAP) would significantly add to the prediction of problem gambling, when combined with demographic information and information on coping styles.

**Method**

**Participants**

A total of 202 adult participants aged between 18 and 65 years completed the survey for this study. The data from 13 of these participants have been omitted from the results because of unreliable (due to intoxication etc.), inconsistent or incomplete data. The remaining 189 respondents comprised 108 males (M Age = 33.14 years, SD = 11.32 years) and 81 females (M Age = 34.09 years, SD = 13.58 years).

Respondents were selected using a convenience sampling technique from 11 different gaming venues throughout Victoria, including a Casino. Gaming venues were chosen for the point of data collection so that a larger number of poker machine gamblers could be surveyed. Approximately 85% of the poker machine gamblers who were approached wished to participate in the survey.

**Measures**

All participants were administered a survey containing a demographic questionnaire and a modified version of the South Oaks Gambling Screen (Lesieur & Blume, 1993), which was modified by replacing some of the culturally irrelevant gambling activities within the scale, with activities that would be relevant to Australian gamblers. Participants’ were also administered the
Short Form Coping Scale for Adults (Frydenberg & Lewis, 1997) and the G-MAP Maroondah Assessment Profile for Problem Gambling (Loughnan, Pierce & Sagris-Desmond, 1999).

**Demographic Data.** Demographic information included each participant’s date of birth, gender, marital status, occupational status and suburb of residence. Information regarding the language spoken within a participant’s home, and the culture that the participant identified with was also collected.

**Problem Gambling Behaviour.** A modified version of the South Oaks Gambling Screen (SOGS) was used as an indicator of problem gambling within this study. For the purpose of the current study, and in accordance with the work of Gambino, Fitzgerald, Shaffer, Rennerand and Courtnage (1993) and Trevorrow and Moore (1998), participants who answered ‘yes’ to 0 or 1 of the scored questions on the SOGS were defined as having no gambling problems. Participants who answered ‘yes’ to 2, 3 or 4 of the scored questions on the SOGS were defined as having potential mild to moderate gambling problems. In line with Trevorrow and Moore’s (1998) definition, a participant answering ‘yes’ to 5 or more on the SOGS will be conservatively defined as a possible problem gambler.

Any participant who indicated that he or she had never played poker machines, either at a Casino, pub or sporting club was classified as a non gambler in relation to poker machine playing. The data from these participants was then omitted from the results, regardless of their other gambling activities.

**Coping Styles.** Frydenberg and Lewis’s (1997) 20 item Short Form Coping Scale for Adults (ACS-SF) was used as a self report measure of participants’ coping behaviours in order to define a participant’s style of coping. This scale comprised 18 structured items measured on a 5-point Likert scale where 1= Doesn’t apply or is not used at all, 2 = Used very little, 3= Used sometimes, 4= Used often and 5 = Used a great deal. The last two items on the scale included an optional ‘not cope’ question also measured on the same 5-point Likert scale, and an open response item, which asked respondents to write down anything that they do to cope, other than those things mentioned in the proceeding items. The 19 items (18 structured and one optional) contained in the ACS-SF create four scales that discriminate between coping behaviours.

The first scale measures the coping dimension, “Independently Dealing with the Problem,” comprised the following strategies: Focus on Solving the Problem, Seek Relaxing Diversions, Physical Recreation, Humour, Work Hard, Protect Self, and Improve Relationships. (Cronbach alpha = .65).

The second scale measures the “Non-productive Coping” dimension including Worry, Wishful Thinking, Not Cope, Ignore the Problem, Tension Reduction, Keep to Self and Self Blame (Cronbach alpha = .73)

Finally, the Adult Coping Scale measures another two scales, ‘Optimism’ which includes Focus on the Positive, Seek Relaxing Diversions, Wishful Thinking and Seeking Spiritual Support, and ‘Sharing’ contained Seek Social Support, Seek Professional Help, Social Action and Keep to Self. However, both of these scales should be viewed with caution because of their relatively low Cronbach alpha coefficients of internal consistency of 0.45 (Optimism) and 0.42 (Sharing).

**Motivational Factors for Gambling.** The G-MAP Maroondah Assessment Profile for Problem Gambling (G-MAP) is a reliable and valid self-report inventory (Loughnan, Pierce, & Sagris-
Desmond, 1999) comprising 85 structured items, which assess 17 factors associated with problem gambling. The 85 items are rated by the respondent using a 5-point Likert scale where 0= Does not apply to me at all, 1= Applies to me a little, 2= Applies to me moderately, 3= Applies to me strongly and 4= Applies to me very strongly.

The 17 factors examined by the G-MAP were divided into 5 broad groups. Group 1 ‘Beliefs about Winning’, explores the respondent’s beliefs on how to win money at gambling and comprises the factors Control, Prophecy and Uninformed (Cronbach alpha = .82). Group 2 ‘Feelings’, explores respondent’s emotional states which may be influencing their gambling behaviour and comprises of the factors, Good Feelings, Relaxation, Boredom and Numbness (Cronbach alpha = .89). Group 3 ‘Situations’, explores the respondent’s situational states which may be influencing their gambling behaviours, and comprises of the factors Oasis, Transition, Desperation and Mischief (Cronbach alpha = .77). Group 4 ‘Attitudes to Self’, explores respondent’s attitudes toward themselves, and how this may relate to their gambling behaviour. This group comprises of the factors Low Self Image, Winner, Entrenchment and Harm to Self (Cronbach alpha = .77). Group 5 ‘Social’ contains the factors Shyness and Friendship (Cronbach alpha = .80).

Procedure

Ethical clearance was sought and granted from the Department of Psychology Ethics Committee at Victoria University of Technology. The managers of various hotels equipped with poker machines were approached by telephone to explain the study and to ask if they would be prepared to discuss the study further, with a view to negotiating permission to survey patrons inside their venue. While explaining the study it was made clear that participation of patrons would be completely voluntary and that all venues, proprietors and patrons would be guaranteed confidentiality.

In total, 42 gaming venue managers were approached, with only four agreeing to allow the survey of patrons within their venue. Therefore, participants were also approached and surveyed outside seven additional gaming venues as they were departing. Data was collected over four months, with venues being visited at a variety of times and days. When surveying within a venue gaming patrons were not interrupted whilst playing a poker machine, they were approached while waiting to play a particular machine or on completion of a playing session.

Potential participants were approached by the researcher and asked if they would like to participate in a study looking at factors that influence poker machine gambling within Victoria. If the potential participant displayed interest, the researcher provided the participant with an explanation sheet briefly outlining the study, accompanied by an explanation that the survey would take approximately 25 to 30 minutes of their time. Patrons were also advised that all results would be kept confidential, that participation was completely voluntary and that if they wished to, they were free to cease involvement at any time during survey administration.

Patrons who wished to participate in the study were then asked to take a seat away from direct contact with the venues poker machines, and were asked to read and sign a consent form. Participants were then administered on the spot, a survey containing demographical questions, a modified version of the South Oaks Gambling Screen, the Short Form Coping Scale for Adults and finally the G-MAP Maroondah Assessment Profile for Problem Gambling, all of which have been previously described in this report.
Results

All statistical tests used an alpha level of .05. Of the 189 valid cases within this data set, 99 (52.4%) participants answered ‘yes’ to either 0 or 1 of the scored questions on the SOGS. These participants were therefore classified as having no gambling problems. Further 49 (25.9%) participants answered ‘yes’ to 2, 3 or 4 of the questions on the SOGS. These participants were therefore classified as having possible mild to moderate gambling problems. Finally, the remaining 41 (21.7%) participants answered ‘yes’ to 5 or more questions on the SOGS and identified as possible problem gamblers.

Differences due to gender, marital and occupational status on SOGS scores were examined. The sample of the current study consisted 108 male ($M=33.14$ years of age, $SD=11.32$ years) and 81 female ($M=34.09$ years, $SD=13.58$ years) participants aged between 18 and 65 years. Males scored significantly higher ($M= 2.87, SD = 2.95$) than females ($M = 1.79, SD = 2.15$) on SOGS, $t(186.85) = 2.91, p = .004$.

In relation to marital status, this sample of 189 participants included 101 single (55.6%), 53 married (28.0%), 19 De facto relationships (10.1%), 7 divorced (3.7%), 3 separated (1.6%) and 2 widowed (1.1%). Due to small numbers in several individual marital status groups, data were regrouped into two categories representing the partner status. Married or in a de facto relationship were classified as ‘significant other’ group, while participants who were either single, divorced, separated or widowed were reclassified as ‘without significant other’ group. Participants without significant other scored significantly higher on SOGS ($M = 2.73, SD = 2.78$) than participants with significant other ($M = 1.89, SD = 2.46$), $t(187) = 2.1, p = .037$.

Next, the effect of daily activities and occupation on problem gambling was examined. The sample included 136 employed (72%), 20 students (10.6%), 16 people performing home duties (8.5%), 13 unemployed (6.9%), and 4 retired (2.1%). Participants’ occupational status was regrouped into two categories. Participants who were employed or studying were reclassified ‘structured day’ ($n = 156$), while others who have more flexibility in organising their daily routine were reassigned into ‘flexible day’ ($n = 33$). The participants with flexible daily routine scored significantly higher on SOGS ($M = 4.00, SD = 3.45$) than those with structured daily routine ($M = 2.07, SD = 2.38$), $t(38.69) = 3.07, p = .004$.

After examining the differences in SOGS scores for participants according to their gender, marital and occupational status, it would appear that the consideration of these variables might be important when attempting to construct a model designed to successfully predict problem gambling.

Therefore, in order to test the first hypothesis and identify whether problem gambling (measured by the SOGS) can be predicted by determining a participant’s level of use of different coping styles (measured by the Short Form Coping Scale for Adults). A standard multiple regression analysis ($p = .05$ for inclusion) was performed, using the aforementioned demographics (gender, marital group and occupational group) and four coping styles (Independently Dealing with the Problem, Non-Productive Coping, Sharing and Optimism) as predictor variables (see Table 1).
Table 1. Summary of Standard Multiple Regression Analysis for Demographic and Coping Style Variables Predicting the South Oaks Gambling Screen Score (n=189)

<table>
<thead>
<tr>
<th>Measure</th>
<th>B</th>
<th>SE B</th>
<th>ß</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-1.504</td>
<td>.355</td>
<td>-.278</td>
</tr>
<tr>
<td>Marital Status Group</td>
<td>.691</td>
<td>.357</td>
<td>.125</td>
</tr>
<tr>
<td>Occupational Status Group</td>
<td>2.161</td>
<td>.455</td>
<td>.306</td>
</tr>
<tr>
<td>Independently Dealing with the Problem</td>
<td>-.034</td>
<td>.014</td>
<td>-.201</td>
</tr>
<tr>
<td>Coping Style</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non Productive Coping Style</td>
<td>.057</td>
<td>.012</td>
<td>.355</td>
</tr>
<tr>
<td>Optimistic Coping Style</td>
<td>.027</td>
<td>.016</td>
<td>.145</td>
</tr>
<tr>
<td>Sharing Coping Style</td>
<td>.049</td>
<td>.007</td>
<td>.049</td>
</tr>
</tbody>
</table>

It was found that the three demographic variables together with the four coping styles significantly predicted problem gambling as measured by the SOGS, $F(7,181)=11.52$, $p<.001$. These seven variables account for almost one third (28.1%) of the total variance in the scores on the SOGS (Adjusted $R^2=.281$).

Analysis of this model showed both gender ($t(181)=-4.24$, $p<.001$) and occupational group ($t(181)=4.75$, $p<.001$) as independent predictors of problem gambling as measured by the SOGS, revealing that male participants tended to obtain higher scores on the SOGS than female participants, and that participants with an ‘unstructured day’ tended to obtain higher scores on the SOGS than participants who had a ‘structured day’.

Analysis also revealed a tendency for participants ‘without a significant other’ to score higher on the SOGS than participants with a ‘significant other’ ($t(181)=1.94$, $p=.054$, ns), but this variable was not found to be a statistically significant independent predictor of problem gambling as measured by the SOGS.

Of the coping styles, it was found that both ‘Independently Dealing with the Problem’ ($t(181)=-2.37$, $p<.05$) and ‘Non-productive Coping’ ($t(181)=4.84$, $p<.001$) were independent predictors of problem gambling as measured by the SOGS. Lower scores on the ‘Independently Dealing with the Problem’ coping style and higher scores on the ‘Non-productive’ coping style indicated higher scores on the SOGS. However, the ‘Optimistic’ coping style ($t(181)=1.67$, $p>.05$, ns) and ‘Sharing’ coping style ($t(181)=.71$, $p>.05$, ns) were not found to be significant independent predictors of problem gambling as measured by the SOGS scores.
It was further hypothesised that motivational factors (as measured by G-MAP) significantly add to the prediction of problem gambling (as measured by SOGS) when combined with the information on coping styles and demographic data. To test this hypothesis standard multiple regression analysis ($p = .05$ for inclusion) was once again performed.

In order to maintain case-to-predictor ratio at a reasonable level, the analysis performed to test this second hypothesis included only the independently significant demographics (gender and occupational group) and coping styles (‘Independently Dealing with the Problem’ and ‘Non-Productive Coping’) from the first model.

It was found that the two significant demographic variables, two significant Coping Style variables together with the five motivational group variables, significantly predicted problem gambling as measured by the SOGS, $F(9,179)=22.63$, $p<.01$. These significant demographic variables, significant coping styles, and motivation groups account for over half (50.9%) of the total variance in the scores on the SOGS (Adjusted $R^2=.509$). The summary statistics from this analysis is shown in Table 2.

Table 2 Summary of Standard Multiple Regression Analysis for Demographic, Coping Style and Motivation Variables Predicting the South Oaks Gambling Screen Score (n=189)

<table>
<thead>
<tr>
<th>Measure</th>
<th>B</th>
<th>SE B</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-.550</td>
<td>.309</td>
<td>-.101</td>
</tr>
<tr>
<td>Occupational Status Group</td>
<td>.930</td>
<td>.395</td>
<td>.132</td>
</tr>
<tr>
<td>Independently Dealing with the Problem Coping Style</td>
<td>-.012</td>
<td>.009</td>
<td>-.072</td>
</tr>
<tr>
<td>Non Productive Coping Style</td>
<td>.021</td>
<td>.010</td>
<td>.133</td>
</tr>
<tr>
<td>Beliefs about Winning</td>
<td>.053</td>
<td>.025</td>
<td>.172</td>
</tr>
<tr>
<td>Feelings</td>
<td>.038</td>
<td>.023</td>
<td>.185</td>
</tr>
<tr>
<td>Situations</td>
<td>.105</td>
<td>.033</td>
<td>.387</td>
</tr>
<tr>
<td>Attitudes</td>
<td>.027</td>
<td>.029</td>
<td>.088</td>
</tr>
<tr>
<td>Social</td>
<td>-.096</td>
<td>.040</td>
<td>-.214</td>
</tr>
</tbody>
</table>

Analysis of the second model revealed that the demographic variable occupational group ($t(179) = 2.36$, $p<.05$) was an independent predictor of problem gambling. Gender, however ($t(179) = -1.78$, $p>.05$, ns) was not found to be a statistically independent significant variable within this model.
Of the coping styles the ‘Non-productive Style’ (t(179) =2.15, p<.05) was shown to be an independent predictor of problem gambling, while ‘Independently Dealing with the Problem’ (t(179) =1.32, p>.05, ns) was not. Higher scores on the Non-productive Coping Style predict higher scores on the SOGS.

Examination of the motivational groups revealed that ‘Beliefs about Winning’ (t(179) =2.11, p<.05), ‘Situations’ (t(179) =3.14, p<.01) and ‘Social’ factors (t(179) =-2.41, p<.05) were all independent predictors of Problem Gambling while ‘Feelings’ (t(179) =1.70, p>.05, ns) and ‘Attitudes to Self’ (t(179) =.93, p>.05, ns) were not. Higher scores on the groups ‘Beliefs about Winning’ and ‘Situations’ and lower scores on the group ‘Social’ indicated higher scores on the SOGS.

The increment in the proportion of variance obtained by the removal of nonsignificant demographics and coping styles, and the addition of five motivational groups within the second stage of the model, was found to be significant, F (2,179)=42.84, p<.01.

**Discussion**

Overall, this study supports the notion that coping styles, motivational factors and specific demographic data predict the level of problem gambling among poker machine players within Victoria. The first hypothesis in this research project states that the level of a participant’s problem gambling, can be predicted by determining the participants gender, marital and occupational status, along with the extent to which they use different coping styles. This hypothesis was supported along with the second hypothesis that adding motivational factors for gambling to a model containing information on coping styles, and demographics, would significantly increase the prediction of problem gambling.

The first stage of this prediction model, incorporating coping styles along with gender, marital and occupational status significantly predicted participants level of problem gambling. The model accounted for almost one third of the variance in individuals’ problem gambling scores. These results are in line with the work of Bonin, McCreary and Sadava (2000) as well as McKee, Hinson, Wall and Spriel (1998) who suggest that various coping behaviours significantly predict problem drinking.

The relationship between gender and gambling behaviour supported by the present study is consistent with the work Moore and Ohtsuka (1997) who believe that gender can be used as a reliable predictor of problem gambling. Similarly, research conducted by Bolen and Boyd (1968) and (Lesieur & Blume, 1987) who report marital and employment difficulties as influencing factors of problem gambling, are consistent with the present results.

Analyses of this model revealed that the demographic variables gender and occupational group were statistically significant independent predictors of problem gambling, specifically that male participants’ tended to obtain higher scores on the SOGS than female participants’, and that participants with an ‘unstructured day’ tended to obtain higher scores on the SOGS, than participants who had a ‘structured day’.

Regarding gender, these findings are in line with research by Volberg and Steadman (1988), who conducted research into problem gambling and discovered that 64% of the problem or pathological gamblers within the study population were males. However, the present findings are in contrast to the results from a study conducted by Ohtsuka, Bruton, DeLuca and Borg (1997) who found that females were just as likely as males to be poker machine problem gamblers.
The finding that an ‘unstructured’ daily routine predicted problem gambling (and remained a statistically significant independent predictor of problem gambling in the second stage of the model) lends support to the work of Castellani, Wootton, Rugle, Wedgeworth, Prabucki and Olsen (1996) who also found a link between unstructured daily activities and problem gambling with 50% of the pathological gamblers within their study being unemployed.

Analysis of these results also revealed a tendency for participants ‘without a significant other’ to score higher on the SOGS than participants with a ‘significant other’, but this variable was not found to be a statistically significant independent predictor of problem gambling. Conflicting findings also exist in the literature. Lesieur and Blume (1987) suggest that separation, divorce and unemployment are related to the onset of problem gambling, while Volberg and Steadman (1988) report that until the onset of problem gambling individuals are mostly regarded as highly employable individuals with stable family lives.

The role of marital status as a predictor of problem gambling is therefore unclear, and remains unresolved in the present study. This question may require further investigation.

Of the four different coping styles, ‘Independently Dealing with the Problem’ and ‘Non Productive’ coping were found to be statistically significant independent predictors of problem gambling. Lower scores on the ‘Independently Dealing with the Problem’ coping style and higher scores on the ‘Non-productive’ coping style indicated higher scores on the SOGS. However, the ‘Optimistic’ and ‘Sharing’ coping style were not found to be significant independent predictors of problem gambling.

These statistically significant findings for ‘Independently Dealing with the Problem’ and ‘Non-Productive’ coping support results from studies conducted by Castellani, Wootton, Rugle, Wedgeworth, Prabucki and Olsen (1996) that reported lower levels of productive coping in a group of veterans with gambling problems.

Furthermore, these results support the findings of Johnson and Pandina (2000) and Maisto, Connors and Zywiak (2000) which suggest that the more that an individual employs a negative or non productive coping style, the greater the likelihood of the individual becoming a problem drinker.

Regarding the second stage of the proposed prediction model, it was found that the incorporation of motivational factors into a model containing significant demographic variables (gender & occupational group), and significant coping styles (‘Independently Dealing with the Problem’ & ‘Non-Productive’) significantly added to the prediction of participants problem gambling.

This model accounted for over half of the variance in problem gambling scores, lending support to research by Chantel, Vallerand and Vallieres (1995) proposing that motivation is a key determinant of gambling behaviour.

Examination of the motivational groups revealed that ‘Beliefs about Winning’, ‘Situations’ and ‘Social’ factors were all statistically significant independent predictors of problem gambling, while ‘Feelings’ and ‘Attitudes to Self’ were not. Higher scores on the groups ‘Beliefs about Winning’ and ‘Situations’ and lower scores on the group ‘Social’ indicated higher scores on the SOGS.

The finding that ‘Beliefs about Winning’ is a statistically significant predictor of problem gambling supports the work of Moore and Ohtsuka (1999a) who suggest that young problem
gamblers beliefs about winning are reliable predictors of problem gambling behaviours. Whitman-Raymond (1988) reported that the majority of problem gamblers within his study had suffered losses prior to the development of their problem gambling behaviour, which is consistent with the fact that ‘Situations’ were found to be a statistically significant independent predictor of problem gambling within the second prediction model.

The significant finding for ‘Social’ factors as a proposed predictor variable within this model, lends support to Dumont and Ladouceur (1990) findings that suggest that individuals gamble in order to take part in social activities.

Statistically nonsignificant contribution of the factors ‘Feelings’ was contrary to Anderson and Brown’s (1987) and McCormick’s (1987) assertions that feelings while gambling are important influencing factors in the development of problem gambling behaviours, with many individuals gambling because of the good feelings and euphoria they experience during play.

Results indicating that ‘Attitudes to Self’ were not significant independent predictors of problem gambling are contrary to both Jacobs (1986) who suggests that pathological gambling may stem from low self esteem, and Taber, McCormick and Ramirez (1987) who argue that individuals develop pathological gambling problems because they see it as a good way of hurting themselves. The reason for these nonsignificant results in the present study is unclear.

Of the nine variables included within this second stage of the model, the only demographic variable found to be a statistically significant independent predictor of problem gambling was ‘Occupational Group’, with this result continuing to support the findings of Castellani, Wootton, Rugle, Wedgeworth, Prabucki and Olsen (1996) as mentioned earlier.

However, as mentioned earlier ‘Gender’ was no longer found to be a statistically significant independent predictor of problem gambling after applying the second stage of the prediction model. The literature is also inconclusive on the gender issue. It is difficult to compare previous findings with those of the present study, as the former did not combine coping styles and multiple motivational factors along with these demographic details. Overall it seems more likely that factors other than gender are responsible for predicting problem gambling behaviour and that gender may act as a surrogate when certain motivational factors are not accounted for. That is, the problem gambling may be due to the effect that gender has on motivational, or other interrelated variables rather than gender per se.

Also, regarding the coping styles within the second stage of the model, ‘Non-productive’ coping style was shown to be an independent predictor of problem gambling, while ‘Independently Dealing with the Problem’ was not. Higher scores on the ‘Non-productive Coping Style’ indicated higher scores on the SOGS.

The significant result obtained by the ‘Non-Productive’ coping style remained in line with studies such as Johnson and Pandina (2000) and Maisto, Connors and Zywiak (2000), but the altered finding of the ‘Independently Dealing with the Problem’ coping style in the second stage of the model fails to support to the findings of the previously mentioned study by Castellani, Wootton, Rugle, Wedgeworth, Prabucki and Olsen (1996).

The results obtained within the present study are of particular interest as this is the first time that the effect of specific demographics, coping styles and multiple motivational groups have been treated as complementary variables and have been explored within the one model.
Finally, the increment in the proportion of variance obtained by the removal of insignificant demographic variables and coping styles and the addition of five motivational groups within the second stage of the model, was found be statistically significant. This statistically significant increment in the proportion of variance between the first and second model supports the use of the second model (which combines motivational factors with coping styles and demographics), over the first model (containing coping styles and demographics alone).

There are however several limitations to this study. Firstly, the data collected for this study did not evenly represent poker machine gamblers throughout Victoria. The researcher attempted to survey patrons from all areas of Victoria, with venues in the Western, Eastern, Southern and Northern suburbs being visited, but due to time constraints and the limited availability of participants, many rural areas remained under represented. Therefore, caution should be taken before generalising about the results of this study to include all Victorians, and further research should be conducted with special attention being directed towards venues and patrons within rural Victoria.

The fact that the ‘Optimism’ and ‘Sharing’ coping styles were not found to be statistically significant independent predictors within this study, must be viewed with caution. Although, the results of this study have shown that as a whole the ACS-SF is an adequate and useful tool for measuring individuals coping styles, the Cronbach alpha coefficients of internal consistency for both coping styles are relatively low. Therefore, further research may benefit from the use of the Long Form of the Coping Scale for Adults (Frydenberg & Lewis, 1997) to minimise measurement error.

Regardless of its limitations however, the results of this study highlight the importance of considering demographics, coping styles and motivational factors when trying to detect gambling problems. In particular, these results have shown that demographic details such as ‘Gender’, ‘Occupational’ and ‘Marital’ status; coping styles such as ‘Non-Productive’ and ‘Independently Dealing with the Problem’; and motivational factors such as ‘Beliefs about Winning’, ‘Situations’ and ‘Social’ are useful predictors of problem gambling.
References


Sacred and secular play in gambling among Blackfoot peoples of Southwest Alberta

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Abstract
This study is concerned with cultural and experiential contexts that give meaning to gambling among Blackfoot peoples of southwest Alberta in western Canada. Using narrative and myth, the authors examined textual materials gathered from ethnographic and historical records, contemporary versions of Blackfoot myths told by tribal Elders, and autobiographies of Blackfoot individuals with a previous history of problem gambling. Social discourses, through which meanings are constructed, were identified in these oral and archival literatures and the lived experiences of Blackfoot gambling. These discourses indicate that sacred and secular aspects of play persist in contemporary Blackfoot gambling. Cultural themes in contemporary gambling practices and themes linked to the colonial experiences of Blackfoot and other First Nations peoples are discussed. The authors conclude that contemporary forms of gambling by Blackfoot peoples remain informed by traditional cultural practices and are influenced by social structural processes, including experiences of colonization. Implications for design of interventions are discussed.

Introduction
Significant gaps are evident in our understanding of cultural and experiential contexts that give meaning to gambling. Outside anthropology, history and culture studies, the cultural dimensions of gambling have been largely ignored or appear as anecdote. A recent review of twenty years of socio-cultural gambling research indicates that this literature is predominantly focused on pathology or socio-economic impacts, relies largely on positivist constructions that abstract people out of the contexts in which gambling takes place, and reflects dominant western epistemologies (McGowan, Droessler, Nixon, & Grimshaw 2000). These studies of prevalence of problem and pathological patterns of gambling, while expanding our knowledge of harms
associated with compulsive play, fail to deepen our understanding of the social discourses that constitute the context in which players give meaning to their gambling.

The limited research concerned with the social and cultural dimensions of gambling indicates clearly that contexts give both meaning and shape to these forms of play. What people think about their gambling and how they play is generated in a rich cultural and experiential landscape. For example, Fisher (1993) describes a range of subcultures and social processes among young fruit machine players in Britain. Ethnographers such as Heine (1991) and Goodale (1987) observe that card playing among the Tlinglit of northwest North America and Tiwi of northern Australia is a modern adaptation to cash-based economics, serving to extend traditional practices of resource redistribution that signal identity, social rank, and prestige. Further, gambling is recognized as a gendered and increasingly institutionalised activity accompanying shifts in leisure patterns associated with increased urbanization and rapid social and economic change (Hallebone 1997, 1999; Hayano 1989).

A number of prominent gambling researchers have called for research that examines gambling from a broader range of methods and perspectives (Abbott & Volberg 1996; Volberg & Abbott 1997; Lesieur & Heinemann 1988; Mark & Lesieur 1992; McMillen 1996). McMillen (1996), for example, suggests that different conceptual tools and explicitly political approaches are required to understand contemporary gambling and its rapid expansion. In a post-colonial globalise world, where indigenous peoples are increasingly involved in gambling as players and promoters of play, and bear a disproportionate amount of related harms, there is a compelling need to heed this advice.

It is not our intention to offer an explanatory framework for contemporary patterns of gambling among Blackfoot peoples. Rather, by examining social, cultural and historical contexts of gambling among Blackfoot peoples of southwest Alberta, the present study attempts to offer an alternative, hermeneutic perspective on the meanings given to gambling by traditional and contemporary Blackfoot peoples.

The Narrative Study of Gamblers’ Lives

The narrative study of gamblers’ lives provides an opportunity to explore the meanings given to gambling by gamblers themselves, what one anthropologist has termed the study of social phenomena in terms of local frames of awareness (Geertz 1983). Narrative—social discourse involving a continuous dialogue in which lives are storied and re-storied—has been described as “a meaning making system that makes sense out of the chaotic mass of perceptions and experiences of a life...in search of life plots that better serve the individual in the present” (Josselson 1995, pg 33). Social discourses as “narrative modes of knowing” (Bruner 1986) privilege lived experiences, and are the processes through which meanings are given to lives. Thus, the analysis of narrative autobiographies enables us to study whole persons, to clarify what is real for them in their world (Josselson 1995). This places the observer in a position to “look over their shoulders” (Geertz 1973) rather than “titrate out bits” (Josselson 1995, pg 31).

But in looking over gamblers’ shoulders, we must be aware that we are not always peering through the same cultural lens. Commonly, people try to make sense of their world on the basis of a set of shared assumptions about how the world operates. This sense-making occurs within the context of symbolic frameworks termed ‘worldviews’ (Lavenda & Schultz 2000) that constitute the cultural lenses through which the individual, their society, and the world are perceived. As a particular form of narrative, myths form the symbolic base of a culture (Gabriel 1996) and codify worldviews, serving as a set of cognitive tools to integrate personal experiences with a wider set of assumptions (Lavenda & Schultz 2000; Levi-Strauss 1979). Gambling occurs as a common
theme in the myths of indigenous peoples across North America, where gambling is the central motif in moral tales of loss and equalization and archetypal tales involving culture heroes (Gabriel 1996; Huizinga 1950).

**Gambling and Blackfoot Peoples**

Several factors make the study of cultural dimensions of contemporary gambling among Blackfoot peoples of southwest Alberta compelling. Gambling among the Blackfoot, as among other First Nations peoples in North America, was both a sacred and secular activity prior to the coming of Europeans to western Canada (Gabriel 1996; Culin 1992/1907). A variety of games and activities were pursued among the Plains peoples, including concealment games such as the hand (or stick) game, hoop and stick game, horse racing, foot races, and ‘counting coup’ (accomplishing an heroic deed, such as touching rather than killing an adversary in battle) (Culin 1992/1907; Gabriel 1996; E-1; E-4). The etic, or outsider, perspective of European observers often led them to misunderstand the meanings given to play and what was taking place from the perspective of the players. Tedlock (1992/1907) notes that although early European compilers such as Culin (1992/1907) typologized these games into those of chance and those of skill, paradoxically the participants were trying to influence the outcomes through magical interventions.

The tradition of gambling, as well as the traditional forms, continues in the present day. Added to the traditional repertoire are other modalities of gambling such as video lottery terminals, bingo, lotteries, casinos, and scratch cards. Traditional forms of gambling such as horse racing and hand games remain popular among First Nations peoples of western North America, with hand game tournaments attended by large numbers of players from across the northwest. Blackfoot peoples commonly host or participate in these hand game tournaments (E-4). As played in pow-wow celebrations in gatherings of Plains peoples, hand games and other forms of gambling have been described by some observers as comprising identity games also, in which separations and alliances between social groups are played out (Herndon 1979).

The social, cultural, and economic impacts of problem gambling on Canadian and Albertan First Nations individuals, families, and communities have been documented elsewhere (Hewitt 1994; Hewitt & Auger 1995; National Council of Welfare 1996). The relatively high estimates for prevalence of adult and youth problem gambling and appalling levels of associated harms observed among other First Nations peoples in Canada are noted among Blackfoot peoples also (Hewitt 1994; McGowan, Droessler, Nixon & Grimshaw 2000; Napi Friendship Centre & Alberta Alcohol and Drug Commission 1996; Volberg 1993; Zitzow 1992). As opportunities for gambling increase through expanded access to video lottery terminals and impending development of on- and off-reserve casinos, it is anticipated that Blackfoot community leaders and decision makers will need to take a more pro-active approach to dealing with the harms associated with problem gambling (Cozzetto 1995). A more comprehensive understanding of gambling among indigenous peoples will reveal the Eurocentrism of both mainstream research and interventions and contribute to development of culturally appropriate and culturally safe interventions to prevent and treat problem gambling.

**The Blackfoot Peoples**

Prior to the spread of Europeans into western North America, the Blackfoot peoples comprised groups of nomadic hunters and gatherers that roamed the vast grasslands of the Great Plains following the buffalo (American bison) herds on which their economies were based. This form of subsistence required sophisticated levels of cooperation and organisation among these groups (Dickason 1997; Grinnell 1962). Extensive trade networks that criss-crossed the length and breadth of the continent were maintained with other tribes (Dickason 1997; Conaty 1997).
Blackfoot social organisation was clan-based and included age-graded men’s societies that performed secret and sacred ceremonies (Grinnell 1962; Conaty 1997). Several secret societies remain active today among the three loosely affiliated nations that form the recently re-unified Blackfoot Confederacy: Siksika, Bloods (Kainai), and Peigan (Piikuni). These tribes were co-signers of Treaty 7 in 1877 along with the Sarcee and Stoney nations under which 93,000 square kilometres (35,000 square miles) of territory in southwest Alberta were ceded in return for education, health, and hunting guarantees, as well as annuities and provisions for establishing an agricultural subsistence base (Dickason 1997).

Blackfoot peoples met with Europeans relatively late in the history of the European invasion of North America. As elsewhere, what emerged from the collision between European and First Nations cultures was a clear difference in worldviews. Judeo-Christian beliefs in hierarchy of being and the ascendency of human beings, the concept of original sin, notions of heaven and hell, and reference to human-made laws clashed with the Aboriginal “harmony ethos” (French 1997), expressed among the Blackfoot as beliefs in natural law and animism, emphasizing inter-relationships and stewardship of the land. In this epistemological perspective, human beings are understood to be relatively insignificant in the cosmos and are believed to co-exist with spiritual beings that inhabit each aspect of the natural world (Conaty 1997; Frank 1999; French 1997).

European colonisation processes included enforced assimilation through residential schools. Political, economic, cultural, and social oppression continues to the present day, resulting in a disproportionate burden of illness and poverty among the Blackfoot, as among other First Nations peoples in Canada (O’Neill, Reading, Bartlett, Young & Kaufert 1999; Waldram, Herring, & Young 1995; Young 1994; Sagger and Gray 1998). Social structural inequities have had devastating effects on First Nations peoples including loss of traditional cultural identity and practices, family and community breakdown, and segregation from mainstream social, economic and political processes (Frank 1999; Sagger and Gray 1998). These factors have been implicated as root causes of addiction and other problems experienced by First Nations peoples (Alexander 2000; Sagger and Gray 1998).

Approximately thirty thousand individuals are enrolled as members of the Blackfoot nations in southwest Alberta at present and, exercising Aboriginal right to self-government, these communities are experiencing a significant revival of autonomy, language, and cultural traditions (Conaty 1997). As the Blackfoot nations seek to restructure their economies, casino gambling figures significantly in plans to provide employment and increase cash flows (Azmier 2000; Cozzetto 1995; Duffie 1998; Peacock, Day, & Peacock 1998).

Exploring the Narratives

This research was conducted as a pilot study to explore the contemporary social and cultural contexts of gambling among Blackfoot peoples of southwest Alberta. The study focused on traditional oral and archival literatures drawn from ethnographic and historical textual materials and interviews with four Blackfoot tribal Elders, as well as interviews eliciting the lived experiences of five recovered gamblers. Themes in these literatures were compared with narrative autobiographies gathered in the interviews with individuals who have a history of problem gambling.
Ethnographic, Historical and Oral Literatures

Textual materials describing traditional stories were gathered from the Glenbow Museum, an Alberta institution that is the repository for historical archives, including original journals, theses, biographies, records, and manuscripts dating from initial European contact in the eighteenth century with Plains peoples (Dickason 1997). Additionally, the NF06 Blackfoot file materials in the electronic Human Relations Area Files (eHRAF), which comprises the full text of ethnographic reports, were searched on the terms “gaming” (OCM524) and “gambling” (OCM525) to retrieve 112 matches from 19 separate documents. These documents reference materials dating from the seventeenth century to 1987. The texts were surveyed for specific forms and contexts in which gambling occurred, which were compared with the interview data from contemporary gamblers and Elders’ stories.

Traditional stories of the Blackfoot peoples include tales of creation, religion, medicine, and war, as well as stories about transformation. To examine the extent to which themes of gaming and gambling persist among the traditional stories contemporary Blackfoot people, three Elders from the Bloods (Kainai) (E-1, male; E-2 and E-3, female) and one Elder (E-4, male) from the Siksika were invited to share commonly told stories with gambling themes. These interviews were audio- or video-taped, with permission, and examined for emergent themes and archetypes.

Phenomenological Interviews with Recovered Blackfoot Gamblers

Five middle-aged and older individuals were recruited using a purposeful sampling technique (Table 1). These individuals were self-described as having had a gambling problem in the past (more than one year previous to the interview), which was now resolved. Each person participated in an in-depth audio-taped interview conducted by a Blackfoot-speaking member of the research team (LF) and a research assistant. Interviews were designed to be loosely structured and open-ended. Following agreement on the content and objective of the interview, including oral or written consent, the interview began with completion of the DSM-IV criteria for problem gambling. Interview participants were invited to share the story of their gambling activities and its resolution, during which the interviewer prompted for expansion on emergent themes. The interview concluded with exploration of traditional and non-traditional influences on their lives and knowledge of traditional stories. The interviews were coded and analyzed using QSR NVivo software (version 1.2) (Richards 1999), and linked to the oral and archival literatures.

Sacred and Secular Play in Traditional Gambling

Gambling has a long history among the First Peoples of North America, as indicated by recovered material pre-dating by several thousand years European contact with the original inhabitants of the continent. The archaeological and ethnographic evidence indicates that gambling activities varied by age group, gender, season, and ritualised purpose (Culin 1992/1907; Ewers 1955, 1958; Gabriel 1996; Hanks & Hanks 1977; Lancaster 1966; McClintock 1968; McFee 1972; Mountain Horse 1979; Wissler 1911, 1912). In pre-European times, a variety of games and activities were enjoyed including concealment games, horse and foot races, and ‘counting coup’ as described previously. A nineteenth century observer noted the popularity of play, opining that, among the Blackfeet (sic) of Alberta “their chief amusements are horse racing and gambling” (Wilson 1888, p. 192). Early non-native observers tended to moralize about extensive gaming and gambling activity, however, “…as plain proof of the evil consequences of a violent passion for gaming upon all kinds, classes and orders of men” (Romans 1775, p. 79). Regarding gambling as heathen worship, missionaries in some areas forced abandonment of this play in their attempts to instil a sense and practice of the Protestant ethic (Culin 1992/1907; Reith 1999).

The secular objectives of play among native North Americans were amusement and gain, but gaming and gambling rituals were “sacred play” also (Huizinga 1950), highly symbolic acts in
which cosmic order was epitomized and maintained (Gabriel 1996). Gambling occurred in a variety of contexts, including healing rituals. The early Jesuit records document the use of dice games in healing of the sick, for example (Laflèche 1639). Culin (1992/1907), who undertook a massive inventory of North American Indian games, concluded that gaming and gambling, through association with myths, ceremonial observances and ritual practices with clearly divinatory and magical functions, were “performed in order to discover the probable outcome of human effort, representing a desire to secure the guidance of the natural powers by which humanity was assumed to be dominated” (Culin 1992/1907, p. 35). In some regions, playing fields were mandala-like “maps of the universe” where winning “secured a blessing for the community and assured cosmic integrity” (Gabriel 1996, pp 14-15). Often, traditional medicines and rituals were employed to influence the outcomes of games. For example, Ewers (1955), citing reports on horse racing compiled between 1750 and 1952, observed “The greatest precaution was taken to prevent a horse medicine man from coming near the race horses for fear that he might use his secret power to make one of the horses tire or falter in the stretch.” Similarly, Helleson (1974) notes that a powerful medicine used in Blackfoot religious ceremonies to place the person who used it in closer relationship with cosmic forces was used often to influence horse racing and hand games. This root was tied to horses’ tails, sprayed on quirts, used in conjunction with stones, or held in the mouth to prevent being overtaken by other riders.

A rich oral literature of myth, legend and allegory survived the invasion and domination of Europeans in North America across the centuries of colonisation (Culin 1992/1907; Gabriel 1996; McGowan, Droessler, Nixon, & Grimshaw 2000). In contemporary times, this constellation of oral literature is part of active cultural practices among contemporary tribal Elders who continue story-telling traditions. Many stories survive in historical archives or ethnographic records. The stories often feature a culture hero as an archetypal figure, exemplified by the Great Gambler of the Navajo (Gabriel 1996) and Pau-Puk-Keewis of the eastern Algonkians (Schoolcraft 1978/1844-45; Longfellow 1989/1855). Among Blackfoot peoples, the foremost culture hero is Napi, the Old Man, a mischievous, daring, manipulative and unpredictable figure featured in several stories with gambling themes, such as a well-told tale about chickadees’ eyes (E-1, E-2, E-3). These archetypal figures exhibit voracious appetites for sex, food, and gambling, illustrating the processes and consequences of natural law. Their actions in the stories in which they figure serve to bring about or explain both natural and cultural phenomena (Gabriel 1996). In comparison with the Trickster-type stories of the culture hero, the dangers of excess and reversals of fortune are the central motifs of moral tales of lovers and warriors that describe the plights of ordinary people who gamble too much, bringing dramatic consequences of grief and loss to themselves and their community (E-4). Gambling appears in both styles of traditional stories as “the great equalizer”, portraying transformation, revival, resurrection, and homeostasis (E-1; E-2; E-4; Gabriel 1996).

**The lived experiences of recovered gamblers**

Each individual interviewed perceived him- or herself to have experienced problems related to gambling at some time in the past. Both older and younger participants gambled excessively earlier in their lives on traditional games, including horse racing, hand games and other games of concealment, and cross country running. With the exception of the oldest man interviewed, who had gambled at a time when electronic and casino forms of gambling were not available, each person interviewed had gambled in a combination of traditional and non-traditional games including bingo and rodeo.

The DSM-IV screen for problem gambling was administered to each person at the outset of the interview. The older persons (indicated with * in Table 1) who participated experienced significant difficulty responding to the DSM-IV criteria, however, largely because they felt the
criteria were irrelevant for the social and cultural contexts of the period in which they were gambling. At times, the older participants expressed confusion about the meaning of a question that appeared to bear little relevance for them. For example, in response to a query about gambling with increasing amounts of money, an older man who had gambled excessively in his youth (I-2) responded:

“I don’t know what you mean there in increasing amount of money. To us…five, ten dollars is like a million dollars today, and it’s hard, uh, it’s hard to get that money in my time.”

He continued to admonish the interviewer that neither the amounts of money lost nor accumulating losses were large factors in his gambling. Money was neither readily available nor used much in his young days.

“You don’t realize how much you lost that time. The only thing [is] that you don’t really miss it. Of course, us Indians there we never did pay for power or heat, so you don’t have hardly any bills to pay.”

He found it similarly difficult to respond with yes or no to a question about feeling anxious or irritable when he tried to cut down or stop. In his opinion, the question was not relevant to a time period when people had “to work for their daily bread every day” in a continuous struggle for survival, with no time or energy to be stressed in comparison to contemporary times when people become restless and anxious because they are “just sitting at home staring at their walls”. Rather than trying to escape from problems, he perceived himself as “looking for a pot of gold”. As he was separated from his family in boarding school and lived by himself during his gambling days, he claimed not to have lied to anyone about his gambling, largely because he had no one to lie to. Similarly, job loss in an era of “no job to lose” was not perceived as a relevant question.

Table 1. Description of Interview Participants.

<table>
<thead>
<tr>
<th>Interview</th>
<th>I-1</th>
<th>I-2</th>
<th>I-3</th>
<th>I-4</th>
<th>I-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>62</td>
<td>64</td>
<td>47</td>
<td>37</td>
<td>49</td>
</tr>
<tr>
<td>Gender</td>
<td>female</td>
<td>male</td>
<td>male</td>
<td>female</td>
<td>male</td>
</tr>
<tr>
<td>DSM-IV score</td>
<td>6/10*</td>
<td>3/10*</td>
<td>10/10</td>
<td>9/10</td>
<td>9/10</td>
</tr>
</tbody>
</table>

Analysis of the interviews with recovered gamblers revealed a number of cultural themes. Blackfoot versions of the “hero” archetype that reflect traditional mythological figures were well known among the participants, and were freely associated with gambling. In recounting a story about Napi, for example, one participant observed “he would have made a real gambler” (I-1).

In a society with limited employment and limited access to cash, interdependent relationships among extended family members provide a resource base for cash to gamble with and to buffer gamblers from the misfortune of losing:

“There’s times where I’d lend money away, and then I would expect it back…just so I can go gambling…Even if they ask for money, you give it to them and don’t ask for it back cause sooner or later you’ll get it back. If not from that person…your needs would be met later on, when you really need something.” (I-4)
Consistent across each of the interviews were themes related to malevolent and benevolent spiritual interventions and the search for authentic spirituality. Each spoke of using practices linked with traditional spirituality to influence the outcomes of their gambling, but came to the eventual realization that using traditional sacred practices to influence the outcome of gambling was wrong and consequences would obtain. For example:

“I used to bring a rock…I just thought it would help me, because of the Indian way, you’d think a rock is uh a rock it sort of like helps you?…In any of our religious [societies]…there’s a rock involved. So I figured, well, if …that helps them and they pray with their rocks…I get myself a luck rock [and] pray with my rock…So I used to go to bingo with my rock and I put it in front of my card. So I rubbed the rock with the, you know, the cards and thinking I’d get away with it…I got led astray in thinking, well, if I can get a rock, you know, how cause it’s got life, and it’s gonna be my help, it’ll help me win. And it got to where I’d smudge and pray and then [pick up] a rock off the ground and everything.” (I-4)

As in earlier times (Helleson 1974), use of traditional medicines to win at gambling in order to gain prestige and live the experience of the hero is understood to be relatively common. Most often, a particularly powerful root used in sacred ceremonies is employed:

“It’s still around, still around. [The use of the medicine] came back powerful. It…almost died out, and it came back powerful in the late 70s and 80s. Everybody wants to be a champion at these [games], and win. What did they do? They pay out to some people. They want to win. And that thing came back up again. Very strong.” (I-2) [Author’s emphasis]

Traditional medicines are used in gambling for protection or to prevent others from winning as well, however. One participant recalled when he believed that someone had tried to prevent him from winning at rodeo by use of traditional medicines. He had been badly injured as a result and, from that time,

“I always had protection against being hurt or um, misfortune…to protect myself…Those people use [protection] continuously. And they can use it to harm someone, to stop you from winning…you go to a bingo hall nowadays and you hear about the people using medicine…Just about any place where…you’ve got a chance of winning something.”(I-3)

Traditional beliefs and practices were influential in the eventual resolution of excessive gambling also:

“[I dreamed] I was gambling [in a bingo hall]…and …a few tables away from me there was three Indian people…they had won at the bingo and they were trying to get the attention of the caller. And the caller didn’t pay any attention to them, just kept calling the numbers. And I was looking at them…and I thought, gee …he’s not acknowledging their winning. But when I looked at those people they were from the Blood reserve. They were all three people dead…They died a long time ago…Today I still take it [as an omen] that I should quit gambling.”(I-1)

Moreover, the impetus to quit gambling led the participants to search for authentic spirituality:
“Our Creator, like, created everything and the rocks and, you know, using the rocks, to pray and try to use it the wrong way [to win at] gambling, well, that’s not the right way. But having a, a rock there to guide you through life, I guess it would be…better to use it that way.” (I-4)

“She had her Grandmother prepare something for us and, and we would take it with us to the casino… and we would put some in our mouths, and we thought we would have some good luck now. But it just never happened…that’s not right to be using prayers and your Indian religion to help you in your gambling. It was false.” (I-5)

Further themes in the interviews were clearly linked to experiences of colonisation and on-going social structural marginalisation that perpetuates the liminal status of Blackfoot peoples:

“It was easy to pick up on these bad habits because sometimes there just was no other source of income or activities to supplement rations in the older days. And then, later on, the introduction of welfare really contributed to gambling because it was sort of…a fixed income, but it was a guaranteed income and regardless of whether you blew it all on gambling or not, you knew at the end of the month you would get that welfare cheque. So it just kind of perpetuated itself.” (I-5)

Ethnocentric Epistemologies in Gambling Studies

As noted previously, the DSM-IV screen for problem gambling includes criteria that have little relevance in the lives of First Nations peoples with experience of colonisation or whose worldviews do not follow western cultural norms. Based on this analysis of Blackfoot worldview and experience of problem gambling, we offer the following contrast between the characteristics of gambling as the phenomenon is understood in western (Ladouceur, 2001) and Blackfoot epistemologies (Table 2). While acknowledging the range of individual experiences, we offer this alternative construct as exemplifying the central tendencies of cultural form (Leigh, 1998) and “ways of knowing and being, which still endure” (Smith 1999) in contemporary Blackfoot culture.

As described by Ladouceur (2001), conventional western views of gambling suggest that resolution of problem gambling occurs through a process termed ‘recovery’ in which previously discarded, destroyed, or neglected states of being such as employment, property ownership, and relations with others are understood to be re-built. In contrast, resolution of problem gambling among the Blackfoot participants is described most accurately as occurring through healing processes mediated through traditional beliefs and practices. As pointed out by a Blackfoot (Peigan) addictions counsellor, “recovery” of that which you have never had (such as stable employment, property, parent-child relationships) is simply not possible for many colonized peoples (H.Crow Eagle, personal communication, November 2000).

A further contrast can be discerned in the objective of gambling. From a western perspective, gambling is about money; from a Blackfoot perspective, the promise of a “big win” of money is a factor, but the promise of prestige or merit is significant and the hero’s journey is exemplified in the archetypal culture hero, Napi, and stories of heroic figures counting coup or winning at rodeo competitions.

Neither is gambling necessarily perceived as a leisure activity among First Nations peoples. For many Blackfoot, it is one of the few venues in which individuals may gain access to ready cash.
Moreover, in other contexts such as pow-wows, gambling becomes an identity game in which larger social relationships are played out between tribes, sub-tribes and non-native groups, as noted among other First Nations peoples of North America (E-4; Herndon 1979). Finally, the common use of traditional medicines by Blackfoot players to influence outcomes, consistent with belief in natural law, contrasts with western notions of prediction and randomness.

Table 2. Comparison of models of Western and Blackfoot worldviews on gambling

<table>
<thead>
<tr>
<th>Western worldview (Ladouceur 2001)</th>
<th>Blackfoot worldview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recovery</td>
<td>Mediated healing</td>
</tr>
<tr>
<td>Money</td>
<td>Prestige or merit</td>
</tr>
<tr>
<td>Leisure</td>
<td>Depends on context</td>
</tr>
<tr>
<td>Prediction</td>
<td>Influence</td>
</tr>
<tr>
<td>Randomness</td>
<td>Natural law</td>
</tr>
</tbody>
</table>

Conclusions

This study supports the view that cultural, historical, and experiential contexts shape the meanings given to the gambling experience. Differences in individual experience of gambling, problem gambling, and recovery or healing are evident across generations within Blackfoot communities, as well as between natives and non-natives. Sacred meanings appear to persist in the pursuit of play, and traditional medicines continue to be used to influence outcomes. How widespread these perspectives and practices are, or may become, is unknown at present. The present inquiry suggests they are more widespread and deeply rooted than previously perceived. As native revitalization movements gain momentum, increasing numbers of Blackfoot peoples are constructing meanings and seeking resolution for gambling and other problems in the context of traditional or neo-traditional spirituality, as they seek cultural identities traced in traditional Blackfoot worldviews.

The oral literatures, archival materials, and narrative autobiographies explored in this study suggest that gambling among contemporary Blackfoot peoples is an activity in which individuals seek “pots of gold” and prestige in an increasingly secular world in which they have liminal status. There is evidence of traditional beliefs and practices continuing to provide a spiritual dimension to gambling, however, and sacred elements persist in the meanings given to contemporary play. This is evidenced as gamblers seek to influence outcomes with reference to traditional Blackfoot cosmology in which concepts of prediction and randomness has no place.

The results of this study suggest also that research into problem gambling among the First Nations peoples of Canada must take into account traditional forms of gaming and gambling, associated social discourses, more recent experiences of colonialism, and concomitant social, economic, and political marginalisation. Further, we suggest that prevention and treatment interventions, predicated on western cultural norms and ways of knowing and being, need to be reconsidered to provide relevant and appropriate options for those individuals who generate meanings and seek solutions in the context of non-western epistemologies.

Acknowledgements

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initiative of Alberta Learning. The support of the Alberta Gaming Research Institute (AGRI) is gratefully acknowledged.

**Endnotes**

1. Contributions from individual Blackfoot Elders who participated in this project are referenced by alphanumeric codes. Thus, three Elders from the Blood tribe are indicated by E-1, E-2, E-3; an Elder from the Siksika tribe by E-4.

2. The DSM-IV screen for problem gambling is a ten-item questionnaire that includes questions about pre-occupation with gambling, gambling with increasing amounts of money, loss of control over gambling, restlessness or irritability when attempting to cut down or stop, gambling to escape or relieve mood, chasing losses, lying to family or others about gambling, committing illegal acts or relying on others to finance gambling, or jeopardizing or losing relationships because of gambling. A score of three or more is considered indicative of problem gambling. (American Psychiatric Association 1994).
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Sportsbetting: The biggest risk of all?

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Abstract

Betting on sports has had a long and troubled history in Australia and elsewhere. Yet legal sportsbetting is the fastest growing form of gambling, rapidly developing into a thriving global industry. This paper examines the history of sportsbetting to explain why sportsbetting was prohibited in Australia for most of the twentieth century. Progressive legalisation since the 1980s has paved the way for the recent proliferation of sportsbetting operators, many offering access for punters around the world through the Internet. A convergence of forces (globalisation of sport, telecommunications technology, investment by transnational corporations, the liberalisation of gambling legislation) have created conditions that make it difficult for any one government to effectively control this development. This paper reviews the current state of play to identify issues of concern including: regulatory inconsistencies between states/territories and between operators; controlling illegal activities; threats to the integrity of the games and consumer protection. It also briefly raises a number of issues for further research and analysis to assist our understanding of this modern phenomenon.

Introduction

Sporting events have been the object of betting in Australia since at least the first decade of the nineteenth century. Billiards, cock fighting, pedestrianism (running), boxing and boat racing were all popular with colonial gamblers by the 1820s. Boxing was particularly popular in the first half of the century, but was overtaken by cricket and football when they emerged as the main organised sports around the middle of the century. By the 1890s cycling races were also the focus of widespread gambling.

17 For a concise history of Australian gambling see Jan McMillen et al. 2000. Australian Gambling: Comparative History and Analysis. Victorian casino and Gaming Authority.
In the nineteenth century, betting on sports was a legal though unregulated activity. Nevertheless, magistrates and the police were concerned about the “public nuisance” caused by boxing matches and some other sports. Around the end of the century a series of scandals suggesting bribery or attempted bribery in cricket, cycling and football provided ammunition for those who opposed sportsbetting. In the first decade of the twentieth century Australian state governments gradually outlawed betting on all sports other than horse racing on a racecourse.18

For most of the twentieth century sportsbetting remained illegal. However, this fact did not prevent sports followers from betting illegally on cricket, football, boxing and sometimes other sports such as golf. In the 1980s a limited amount of sportsbetting was legalised through the off-course TABs that operated variously on events such as the Sydney-Hobart yacht race, the Bathurst car races and the recently introduced one-day cricket matches. These experiments were not particularly successful and most were abandoned although they were followed in Tasmania and Victoria by legislation that enabled bookmakers operating on course at horse racing meetings to offer odds on Australian Rules football matches. In the same decade the state controlled TABs also began to operate regularly on football matches through their various FootyTab operations.

Although FootyTAB was relatively successful the comparatively small pools and the limited betting options available to the punters ensured that large-scale gamblers continued the practice (prevalent from the time sportsbetting was banned) of placing their bets with illegal bookmakers. The illegality of most sportsbetting made it impossible to determine the level of its popularity although anecdotal evidence suggests that it was both widespread and accessible.

The true potential of sportsbetting was revealed in the 1990s with the emergence of licensed sportsbetting agencies, initially in the Northern Territory and subsequently in other states and territories.19 By 1999, sportsbetting was being offered in all Australian jurisdictions by approved sports bookmakers and most TABs. Today individual bookmakers licensed by the relevant government and racing authorities often provide both wagering on races and sportsbetting (Table 1).20 However, since the 1990s private companies such as Centrebet and Canbet have also been permitted to operate in the Northern Territory and the Australian Capital Territory.

Thus sportsbetting providers in Australia are comprised mainly of the state and territory TABs and a handful of the larger licensed bookmakers who mainly conduct their business via telephone and the internet (Table 1). The TABs conduct sports betting under specific totalisator licences that allow them to take bets off-course through their numerous agencies and through hotels and clubs. All TABs have also established growing market in telephone and Internet betting.

Although they are discrete corporate entities,21 TABs in each state/territory tend to operate along similar lines with an extensive distribution network for their wagering products. However, in practice there are only two TAB sports betting regimes in Australia. TAB Ltd (NSW) operates SportsTAB while TABSportsbet, managed by Victoria’s Tabcorp, is a consortium of all other state and territory TABs. All TABSportsbet participants operate under the Victorian Rules of

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20 It is not possible in this brief paper to provide state-by-state summaries of these regulatory arrangements.
21 The exception is TABQ (Queensland) which purchased the Northern Territory TAB (NT-TAB) in 2000. TABQ is also currently negotiating purchase of the South Australian TAB (SA-TAB).
Betting with a common investment pool and common regulatory framework. All betting contingencies for TABSportsbet are managed by Tabcorp for a fee.

Table 1. Totalisators and sports bookmakers by Australian state/territory, 2001*

<table>
<thead>
<tr>
<th>State</th>
<th>Totalisators</th>
<th>Sports bookmakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>TAB Limited</td>
<td>59 authorised sports bookmakers. Major providers are: Davidson All Sports, Peter Kafataris, Bill Hurley &amp; Alex Read.</td>
</tr>
<tr>
<td>VIC</td>
<td>Tabcorp</td>
<td>No licensed sports bookmakers</td>
</tr>
<tr>
<td>QLD</td>
<td>TABQ</td>
<td>No licensed sports bookmakers</td>
</tr>
<tr>
<td>ACT</td>
<td>ACT TAB</td>
<td>Canbet, City Index, Capital Sports and Megasports.</td>
</tr>
<tr>
<td>TAS</td>
<td>TAS TAB (The Tote)</td>
<td>No licensed sports bookmakers</td>
</tr>
<tr>
<td>NT</td>
<td>NT TAB</td>
<td>Centrebet and International All Sports</td>
</tr>
<tr>
<td>WA</td>
<td>WA TAB</td>
<td>A small number of licensed bookmakers</td>
</tr>
<tr>
<td>SA</td>
<td>SA TAB</td>
<td>A small number of licensed bookmakers</td>
</tr>
</tbody>
</table>

Source: Personal communication with state and territory governments. TABs and bookmakers listed here offer sportsbetting via telephone and the Internet. Many providers including several TABs can offer contingency betting.

**Sports Betting Expenditure in Australia**

Turnover and expenditure data on the Australian sports betting market are amongst the most accurate in the world, though discontinuous and patchy. From a relatively low base, sports betting expenditure in Australia has increased significantly between 1994-95 to 1999-2000 (Table 2). In 1997-98 sportsbetting represented only a small proportion of total gambling expenditure, accounting for less than $24.5 million of the $11 billion spent on Australian gambling. However, given Australians’ passion for both sport and gambling, and the promotion of Internet sportsbetting to international clients by the fourteen licensed Australian operators, this market has been growing at a rapid rate. In the latter half of 1998, when World Cup Soccer and AFL football were available, Victoria’s Tabcorp revenue increased by 25 per cent over the corresponding period in 1997. The national rate of growth in 1999-2000 (over 42 per cent) was higher than any other form of gambling. The imminent prospect of expanded opportunities for gambling via Internet, Wireless Application Protocol (WAP) and digital television technology suggests that sportsbetting could become an important focus of national and international gambling activity.

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22 Some states and territories require accurate and detailed information from sports betting providers, while others do not. For example, bookmakers in the ACT are not required to provide detailed information to regulating bodies.


Currently, the taxation benefits to states/territories, and thus to the Australian community, are relatively low. In 1999-2000 sportsbetting generated only $867,000 in taxes nationally. It is also significant that only two states (WA and SA) make provision for a proportion of sportsbetting taxes to be returned to the sports that provide the product (i.e. the game). This contrasts markedly with the accepted practice of directing a proportion of racing betting revenues back to race clubs for future development and promotion of the industry.

New forms of betting continue to emerge. The increasing global popularity of sportsbetting and the proliferation of commercial gambling operators are evident by the growth in the numbers of sportsbetting operators to be found on the worldwide web. Contingency betting and spread betting25, historically popular with sports fans willing to bet illegally, are gaining acceptance with commercial providers who promote it as an entertaining and novel form of gambling.

Internationally, sportsbetting has long been a feature of the gambling scene. During the twentieth century betting on baseball and college football in the United States, although illegal, has been at the centre of headline corruption controversies. Various football codes, in particular soccer, have been the target of concentrated sportsbetting. For example, soccer at the 2000 Olympic Games attracted heavy betting by international punters; and recent cricket scandals have drawn attention to the potential for corruption of officials, players and the game itself.26

While not wishing to deny the benefits of modern sport as both recreation and entertainment, an expanding sportsbetting market also brings risks that have yet to be adequately addressed. These potential risks include:

Social impacts and problem gambling;
Regulatory inconsistencies and the potential for regulatory failure;
The potential for corruption; and
Loss of national sovereignty and cultural identity.

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25 Contingency betting can be defined as a bet that is placed on a certain incident within a sports event, such as the number of runs scored by a batsman in a session, or the first footballer to kick a goal. One form of contingency betting is margins or ‘spread’ betting, which allows punters to place a bet on a spread of outcomes/scores that is determined by the bookmaker.

Social Impacts and Problem Gambling

The internationalisation of sport and gambling provides fertile ground for legalisation and commercial market growth. Indications are that an increasing number of people around the world are embracing online sportsbetting, whether it is legalised in their own country or not. While those countries such as Australia that decide to legalise and regulate stand to achieve a comparative advantage in a lucrative global market, a crucial issue for policy makers is to assess the potential community benefit against the potential social costs.

In Australia, regulatory innovations to date have failed to resolve the social and political risks of problem gambling. However, in debates about policy reform it is often argued that wagering poses less of a risk than other accessible forms of popular gambling such as gaming machines. For example, the Commonwealth was persuaded by arguments from the wagering industry that Internet wagering would be unlikely to result in an increase in problem gambling. In many respects these claims have been supported by available evidence such as the Productivity Commission’s 1999 national study.

Hence responsible gambling legislation and policy innovations tend to concentrate on gaming venues (clubs, hotels, casinos). When wagering is included in such programs, it tends to implicitly have a lower priority than gaming. However, several papers at this conference have refocused attention on the potential risks to individuals and the community of expanded access to wagering. There is emerging evidence that wagering and sportsbetting may be creating increased problems for certain sectors of the Australian community, such as young males. A recent large population survey in the ACT also has revealed that a significant number of ACT residents are now experiencing gambling problems associated with wagering.

It would be short-sighted to assume that the incidence of problem gambling related to sportsbetting will not increase as participation continues to rise and new gamblers are attracted to this activity.

Regulatory Inconsistencies and the Potential for Regulatory Failure

The remainder of this paper will concentrate on regulatory themes. The dynamic and politically sensitive environment of contemporary Australian gambling policy and the diversity of jurisdictional control highlight the complex and risky nature of the relationship between legal/illegal sportsbetting and popular sport.

In Australia, constitutional power for the implementation and control of most forms of gambling rests with the states and territories. Hence the Commonwealth Government historically has had limited jurisdictional power over gambling. However, the development of new telecommunication technology and the evolution of cross-border gambling have altered the division of powers between the national and state governments. For example, the Commonwealth Government has used its telecommunications papers to ban Australian Internet gaming operators from providing a service to Australian residents (the Interactive Gambling Act 2001). Following intense lobbying by the TABs and the racing industry, Internet wagering and sportsbetting have been exempted from the Internet ban. Importantly, however, the Act also prohibits ‘real time’ interactive sports betting on a contingency event within a match or game.

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The racing industry and TABs successfully argued that there are material differences between gaming and wagering. A key argument was that unlike gaming operators who conduct the gambling (provide the service) while also being responsible for the outcome of the game (the product), licensed bookmakers and TABs are required to be totally isolated from the outcome of the event. They acknowledged that the Internet offers a convenient alternative to existing access methods for wagering and sportsbetting, but argued that Internet delivery will have minimal impact on total expenditure, and that all wagering bets are already transmitted over telecommunications lines (eg telephone betting) without adverse social impacts.

Most analysts predict that sportsbetting will increase with Internet usage, although the size of the predicted increase varies. Projected growth in this market begs the question as to what are governments doing to ensure that sports wagering is conducted under a regulated environment with the highest standards of integrity, transparency and generally in the best interests of consumers and the wider community.

At present there is considerable diversity between Australian states/territories in terms of legislative controls and regulatory practices for sportsbetting. The current Australian legislative and regulatory framework for sportsbetting has evolved in an ad hoc manner over many decades. As sportsbetting was being legalised during the 1980s, many jurisdictions saw sportsbetting as simply another form of wagering much like racing. As a consequence, sportsbetting was often modelled on, or incorporated within legislation that already governed race wagering. For example, authority to accept bets on sports is usually limited to approved bookmakers and TABs that bet on the various racing codes. Consequently, the current sportsbetting legislation in many of Australia’s jurisdictions fail to address the distinctive nature of this form of betting or the particular characteristics of the widely diverse sports involved.

Notwithstanding, sportsbetting regulation tends to concentrate on market entry (through the licensing process) and revenue collection, with few jurisdictions giving specific attention to regular monitoring and compliance of bookmaking operations. In this regard there is a pronounced difference between the regulated environment of TABs and the licensed bookmakers who, in the main, are supervised by racing clubs and industry bodies. The privatisation of many TABs (Victoria, NSW, Queensland, Northern Territory, South Australia) has tightened the regulatory environment for these operators. Corporations law and governance, as well as regulatory bodies such as the Victorian Office of Gambling Regulation (VOGR) and the Queensland Office of Gaming Regulation (QOGR) have been added to the ministerial control of these TABs.

TABs thus tend to be authorised and closely monitored by state/territory governments; bookmakers are often regulated by the peak racing industry bodies themselves, such as the Thoroughbred Racing Board in New South Wales. Importantly, industry-based licensing procedures often lack the same probity checks that apply to other forms of legalised gambling such as casino licensees and staff, and club and hotel gaming operators. It should be noted, however, that there are also profound inconsistencies between states/territories in the licensing standards and procedures for gaming.

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29 As in Australia, legislators in many other countries (eg the United Kingdom) also have tended to treat sportsbetting as an extension of racing and internet wagering as an extension of telephone betting.
30 It should be noted, however, that there are also profound inconsistencies between states/territories in the licensing standards and procedures for gaming.
officials alike. The recent International Cricket Council (ICC) Condon Report into betting, matchfixing and corruption in cricket demonstrates that swift and effective action is needed to overcome perhaps one of the most significant challenges facing professional cricket and sport generally. However, while Australian cricket administrators have acted relatively quickly to address the issues, legislative and regulatory reform is generally a slow process.

Attempts by the states and territories to develop a uniform approach to sportsbetting and wagering controls, and a cooperative national regulatory model for the control of interactive gambling have not been successful to date. Most recently a national Wagering Regulators’ Working Party has been established to address issues of consumer protection and common regulatory standards. However the immediate focus of this Forum seems to be on racing reforms and Internet gambling, not sportsbetting.

The move by the Commonwealth Government to override state/territory jurisdiction for Internet gambling regulation has encouraged support for such initiatives. State and territory governments have begun to respond to recommendations that followed review of their gambling regulatory arrangements under National Competition Policy (NCP). In recent years application by some states/territories of the National Competition Policy has resulted in the proliferation of sole operator sports bookmakers and bookmaking organisations around the country. While some states (eg Queensland, Victoria) have elected not to join this trend, other states (NSW, ACT, NT) have licensed new bookmakers and encouraged competition with TABs.

Without adequate and uniform regulatory safeguards there is reason for concern about the impact of continued application of ‘free market’ principles and deregulation on the integrity of sports and potential corrupt or criminal activities. Yet the most recent determinations from the National Competition Council (eg on gaming machines in Victoria) suggest a greater willingness by the Council to acknowledge that it may be in the public interest in some cases to restrict and manage the gambling market. To date, however, the Australian federal system of government and the highly competitive nature of state gambling policies have precluded uniform legislation and regulations.

Existing sportsbetting legislation and regulations thus operate in a highly dynamic and politically sensitive environment. At the time of writing, some Australian jurisdictions were in the process of, or have recently made significant changes to their legislation that govern sportsbetting. Northern Territory, the ACT and South Australia have brought wagering and sportsbetting regulation under the authority of independent statutory authorities responsible for all forms of gambling. Recent steps also suggest a greater willingness by some governments to take seriously the potential for betting to corrupt professional sports. In 1998 Queensland introduced several changes to sports wagering legislation and introduced the Wagering Act 1998. South Australia and Western Australia also have made major changes to their legislative frameworks in recent times.

Even so, we have identified numerous inadequacies and concerns with existing sports wagering legislation and regulatory systems in Australia:31

- Lack of a uniform legislative and regulatory framework for all jurisdictions;
- The tendency to incorporate sportsbetting (which has potential for a wide range of complex bets) into the regulatory model for race betting (which has a simple win/place betting structure);

31 Note that these regulatory shortcomings are not indicative of all Australian jurisdictions, but rather they summarise the main legislative inadequacies at a national level.
Variable, inconsistent and often undefined licensing standards for sports bookmakers;

- A high degree of ministerial discretion to approve bookmakers and the types of bets that can be made;
- Vague and imprecise regulation of sports bookmakers by racing clubs;
- Different regulatory standards and political influence between licensed bookmakers and TABs;
- Monitoring and regulatory compliance of bookmakers/TABs is in most instances complaints driven and hence reactive;
- Lack of specific legislation and/or sanctions in several states to deter or prosecute bookmakers who offer bribes or inducements to sports players and officials, or who solicit information that could affect betting odds or the outcome of the game. Some states (eg Queensland, Victoria, South Australia) have legislated against bribery of key public officials or a licensed bookmaker. However often this legislation does not prohibit or sanction the bribery or inducement of a sports player or non-government employee. It continues to be the case that penalties and/or prosecution can only occur when a criminal offence is committed;
- Lack of consultation with peak sporting bodies in the development of legislation and policy, including the licensing process and types of authorised bets;
- Pressure on peak sporting bodies for the protection of their players and officials from unscrupulous bookmakers;
- With one or two exceptions (WA and SA), no designated fund to distribute some of the revenue derived from sports wagering back into sporting activities; and
- In most jurisdictions, absence of an independent ‘watchdog’ authority to protect the public interest (as established for gaming regulation in several states).

The Potential for Corruption

Risks to sport – the players, officials, supporters and the game itself - from sportsbetting have received little, if any attention from Australian legislators and regulators. As previously noted, existing Australian legislation is outdated and not capable of dealing with present and on-going changes and growth in sportsbetting products, the range of betting options, the technical modes of delivery, or sponsorship of sport and players by companies with sportsbetting interests. The impact of sportsbetting and the potential risks to sports associations, players, gambling providers and punters have been exacerbated by the commercialisation and global televising of sport, and the impact of digital technology. Sportsbetting is now a highly technical industry promoting a complex product to an expanding global market.

Globalisation and commercialisation of sport has seen many sports become international commodities, marketed, sponsored and owned by large corporations and media enterprises. In parallel development, the global market for sportsbetting has expanded, facilitated by emerging technologies such as the Internet and digital television. Online sportsbetting operators, gambling industry newcomers as well as reputable companies such as Ladbrokes, Coral and William Hill, offer their betting services to sports fans around the world.

Sport as a betting commodity is extremely well suited to Internet delivery for several reasons. Firstly, the sheer diversity of contingencies within a game allows for multiple and simultaneous bets with expanding betting types. Secondly, sport is a global phenomenon, with numerous sports

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32 Notably, some states have recently legislated against ‘bribery’ of public officials by bookmakers (eg Queensland’s Wagering Act 1998). However, no sanctions exist against bribery of players or sport officials, soliciting match information, etc.
and specific games and matches followed and watched by millions of people from countries around the globe. Taken in this context there are many jurisdictions where sports betting is not legally offered, and as a consequence customers have the convenience of placing bets over the Internet with providers who are licensed to do so in other jurisdictions such as Australia. Centrebet, an Internet sports bookmaker licensed in the Northern Territory is reported to have 80% of their clientele from overseas, with 20% residing in the US. Canbet derives almost all its income from betting on US college football.

But any commercial and entertainment benefits are offset by the potential risks associated with exposure of sports participants to bribery and dishonesty. There has been considerable media attention paid recently to the corruption of high profile players in cricket, soccer, cycling and boxing. The question of corruption in sport arising from collusion between players, sports officials, bookmakers and/or punters have been highlighted for Australians by the Hanse Cronje scandal and the subsequent King inquiry in South Africa and Condon inquiry by the International Cricket Council.

The potential risks that can occur with contingency bets warrant immediate attention and reform. As a recent inquiry in the United Kingdom notes, ‘because the opportunities to bet not only on the outcome of a sporting event but upon individual events within it, there are increased temptations for participants to fix the outcome of those events. Fixing an event within an event is much easier than fixing the overall result, which it need not affect’. The UK report found that ‘fixing the outcome of a match may require a considerable degree of collusion, possibly involving players on both sides, but some events may be in the hands of an individual player (for instance, the number of wides in an over)’.  

In an effort to protect sport and its players, a number of Australian sporting bodies have attempted to introduce new internal policy frameworks for the purpose of alleviating public anxiety and ensuring the integrity of their own individual sports. Yet despite concerted effort by sporting bodies such as the Australian Cricket Board and Australian Football League, there are few mechanisms in place within Australian gambling regulations to dissuade betting related corruption in sport. Criminal sanctions are presently limited to common law and general statutory provisions of criminal law. Australian betting legislation does not specifically address the potential for corruption or bribery in sport. This makes it difficult, if not impossible to obtain a criminal prosecution for such actions – even if they are perpetrated by a licensed sports betting provider. In this respect, the situation has not improved since this deficiency was first identified by the Australian Cricket Board in 1995.

Yet the nature of sport and betting has altered significantly, presenting greater opportunity for corrupt and unethical behaviour and greater risks to sports players and officials. There has been substantial growth and change in the products and modes of delivery in the sports betting market in recent years, in concert with increasing occurrences of match fixing, bribery and corruption in international sports. The result of these changes and the growing globalisation and commercialisation of sport in that parts of the sports betting industry have become more like the gaming industry, with the same organisation both providing (or sponsoring) the event and the opportunity to bet on it.

35 ibid, p.83.
The most problematic forms of sportsbetting, contingency and margins (spread) betting, are testing the capacity of legislative and regulative frameworks in each state/territory. Contingency and spread betting have become increasingly popular in several countries, including the USA. This form of betting provides a ready means for the corruption of sports. A team member only needs to ‘shave’ a few points off the potential score for the outcome of the ‘spread’ to change dramatically. For example, there may be a spread for the number of three-point shots a basketball team may score over another. It would not be difficult for the team or an individual player to fix the match through decreasing the number of three-point shots they would usually shoot. This form of match fixing is very difficult to detect and concern about whether it is happening has undermined consumer confidence in sport, especially in the USA. When a team even slightly under performs there is doubt amongst consumers as to whether the game was fixed.

A simplified form of margin bets is more common in Australia. Margin bets are focussed not on who will win, but by how much. Bets are made on the margin of victory, or the supremacy of one player/participant over another. Bets are normally settled on the basis of the official results declared by the relevant sports controlling authority at the conclusion of the match/game/series.

At present, sports betting options currently offered by Australian TABs, including contingency bets, are restricted to fixed odds betting. In most states and territories, contingency and margins bets with licensed bookmakers are subject to approval of the minister or licensing body. Internet sports betting is also subject to conditions prescribed in the Interactive Gambling Act 2001 which prohibit interactive bets on events within a game or match (eg the result of a particular ball bowled in an over).

The commercialisation of sport and sportsbetting also requires an urgent assessment of the ethical dimensions of sportsbetting and the sponsorship of sport. As yet there has been no public debate about the ethics or acceptability of sportsbetting providers sponsoring sports and sports clubs on which they accept bets, or of the potential for sponsorship to mask concealed payments.

**Loss of National Sovereignty and Cultural Identity**

At a global level, it seems unlikely that traditional gambling regulation based on the authority of a single government will be effective in the digital world. Online gambling is aimed at cross-border and global markets; it is not confined to a physical location subject to the laws of a nation state. The convergence of gambling, telecommunications media, entertainment and sport, facilitated by powerful alliances of transnational commercial interests, could be beyond the capacity of any one government to control.

Yet nations are taking varied and often contradictory responses to the global sportsbetting phenomenon, creating a complex and uncertain political-legal environment. While some governments continue to be wary of providing a legal environment for sportsbetting operators, others seem keen to capitalise on the new global market, particularly through Internet services.

- After a lengthy and comprehensive gambling review the United Kingdom’s Budd Report has recommended liberalisation of sports betting, along with most other forms of gambling including Internet gaming.\(^{36}\) Indeed, the government has already shown that it is likely to encourage expansion of the sportsbetting market. After established British Internet bookmakers moved their operations to Gibraltar to avoid paying tax, the UK government promptly indicated its willingness to offer tax concessions to attract them.

back onshore. UK sportsbetting providers are rapidly claiming a large share of the international market.

- South Africa also has a nominal policy of legalisation, but currently lacks the legislative and regulatory framework for implementation. The majority of United States governments, in contrast, have maintained their opposition to legalised sportsbetting. Sportsbetting continues to be legal only in Nevada casinos, despite widespread illegal betting on college football and consistent reports of match fixing in many sports. 37
- Similar to the approach taken by the Australian government, a recent review of gambling in New Zealand has recommended that internet sportsbetting be legalised, but not internet gaming.
- Hong Kong seems to be moving towards a similar strategy, although it is possible that Internet lotteries will be approved.

Despite the fragmented and inconsistent national regulations, sports followers wishing to bet on their favourite team or player have no difficulty finding an operator willing and able to accept their wager. Residents of Europe can place an Internet or telephone bet on a World Cup soccer match between Brazil and Iran with bookmakers in London, Alice Springs or Vanuatu. However, the transformation of sportsbetting from a localised, community-based activity in the nineteenth century to a globally shared cultural activity and transnational industry has yet to be investigated or understood. What are the effects of global cultural and economic forces on local culture and process? Do the diverse set of consequences that result when global forces and local contexts meet provoke incongruence and resistance, or accommodation and acceptance? Rather than causing the dissolution of local identities through the establishment of a homogenous global culture, is sportsbetting leading to the rearticulation or ‘reinvention’ of national and local communities?

The cultural importance of sport in establishing national identities and global communities has only recently received attention from analysts. 38 To date there has been an absence of any systematic analysis of the effects of global sports cultures, such as the US basketball and World Soccer and their attendant corporate and intertextual alliances, on local identities and cultural practices such as sportsbetting. Such analysis must begin with the premise that both the global and the local manifestations of sportsbetting can only be understood in relation to each other. Any discussion of the opportunities and threats posed by the globalisation of sportsbetting needs to recognise the transforming nature of interdependent global forces with respect to both political and economic power. Yet we also need to consider that sportsbetting may actually play a role in energising multiple popular and local cultures.

Conclusion

The existing legislative and regulatory framework in Australia does not adequately address the complexity of sportsbetting products and modes, or the potential for corruption and undue influence of players and sports officials. The risks to sport and to the community are compounded by the deficiencies and inconsistency of existing regulatory standards and processes, by the increasing globalisation and commercialisation of sport and the growing impact of telecommunications technology on delivery of betting services.

The current response to the changing environment and sportsbetting market by Australian state and territory governments has been ad hoc, uncoordinated and lacks strategic purpose. Reform of

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37 Ironically, there are signs that several US states are reconsidering their long-held resistance to legalisation of internet gaming.
wagering regulation is lagging far behind that of gaming, and sport is peripheral to debates on gambling policy. There is also a disturbing tendency towards reliance on industry self-regulation or alternatively to attach gambling to existing regulatory frameworks. This seems to be driven by administrative convenience rather than a principled rationale. Such policy decisions do little to create confidence that regulatory reforms will effectively address the specificity and distinctive features of contemporary sportsbetting.

We have also found that there are shortcomings in the current licensing procedures and standards for bookmakers in Australia, risks of corrupt relationships between bookmakers and people involved in sports, and increased opportunities for commercial and criminal influence which justify reform of betting regulation and tighter controls over sportsbetting providers.

For example, our research also raises the question as to whether ministerial discretion is sufficient to safeguard against the framing of inappropriate bets on sports matches, particularly contingency bets. Apart from some football codes (eg the AFL) there appears to have been little input into sports betting regulation by sports administrators, player representatives or other experts that may help prevent the framing of inappropriate bets that are detrimental to the players and the game/sport itself. At present there is little regulation to deter bookmakers from framing bets that risk exposing sports participants to corruption. Importantly, the potential for sports betting providers to engage in corrupt practices has not been clearly specified as an offence in Australian wagering legislation.

Sportsbetting has been subject to a different and generally lighter regulatory regime than gaming. Similarly, while acknowledging that the majority of the British betting industry operates legally and honestly, the UK’s recent gambling review found that the risks of corruption and malpractice in current betting arrangements justify a tightening of regulation. Importantly, the UK review also recommended that law reforms should contain an explicit statutory definition of what is meant by ‘corrupt’ conduct.

Recent Australian policy initiatives have established national mechanisms that provide an opportunity for regulatory reform with meaningful coordinated input by sports bodies. The Wagering Regulators’ Forums and the Ministerial Council on Gambling provide an institutional basis for liaison with sports authorities to ensure that regulators better understand the relationships between individual sports codes and the betting activities (and risks) that each particular game permits. While gambling regulators are primarily concerned with betting activities, working closely with sports administrators will encourage them to understand the needs of that sport and safeguard the particular characteristics of the games. In this way legislative reform would complement measures by sports officials to improve the conduct of sports players and officials. To cite one constructive example, the policy adopted by the WA Betting Control Board requires that contingency bets are compatible with the rules of the particular game/sport.

At a more general level, this paper raises the question as to whether legislation at the state/territory level is in fact able to deal effectively with the dynamic and global nature of contemporary sports betting. Our preliminary research into these issues provides support for a consistent national approach to sportsbetting policy and regulation. More boldly, it reinforces earlier arguments that Australia could demonstrate ‘prompt and imaginative leadership’ with a

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39 Department of Culture, Media and Sport 2001. op.cit.
global initiative to establish international agreements to establish the highest standards for regulation and consumer protection for this new and expanding industry.  

40 see for example, Jan McMillen 2000. ‘Online gambling. Challenges to national sovereignty and regulation’. Prometheus, Vol.18, No.4, pp.391-401.
A psycho-semiotic approach to the analysis of gambling in popular culture

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Abstract

Why aren’t fruit machines vegetable machines? The way that gambling is represented in arenas such as advertising, pop songs, film, news media, or electronic gaming machine iconography can tell us a lot about the dynamics of culture. This paper draws upon key concepts in semiotics and psychology to outline an analysis of the cultural representation of gambling. Such a framework better allows us to distinguish a surface (or manifest) layer of meaning that serves as a compromise formation that mediates latent conflicts. This symbolic compromise formation (paradoxically) serves as a vehicle that simultaneously conceals, expresses, and meets (in a limited way) underlying social and individual needs. Therapists working with problem gamblers are familiar with the way that, for example, electronic gaming machines can function as to allow the player to simultaneously engage in as well as avoid socialising or to simultaneously escape from financial responsibility while attempting to solve their financial problems. This paper extends that functional perspective to the symbolic dimension of gambling.

A Tool of Gambling Machine Trade

Gaming machine designers are well aware of the importance of symbolism. Joe Karminkow, vice president of International Game Technology says that designing games takes “a tremendous amount of intuition. We have to make our product win in design, but also take. It’s about finding the balance, giving the right amount of candy” (Abrams, 1999, p. 62). Gaming machine symbolism disguises the main purpose of gambling machines with a “sugar coating” and the intuition Karminkow refers to taps into a vast reservoir of cultural meanings. A trade advertisement for a poker machine, featuring the Ancient Greek mythological figure Adonis, encapsulates this just as succinctly: “Mythology also comes alive as the ADONIS substitute and
scattered COIN symbols animate when in winning combination. Tempt players with this game and the gods will smile on your casino floor” (2001, p.39)

**Symbolism and disguise**

One answer to the question “Why aren’t fruit machines vegetable machines?” draws upon historical evidence. Marshall Fey (1983) explains that mechanical and (later) electronic gaming machines came to be known as fruit machines because of the fruit symbols used on the early three-reel gaming machines. Fey notes, that lemons were losing symbols on the early “three-reelers” and that this is the origin of the use of the term lemon to describe a bad car or other faulty mechanical product. Some of these early machines were designed to dispense chewing gum with each wager. The fruit-flavoured gum and fruit icons were part of the manufacturers’ strategy to disguise gaming machines as vending machines. These hybrid vending-gaming machines are a manifestation of a clash between contradictory forces. On one side there were the forces such as profit and pleasure. On the other side were forces such as temperance, Prohibition and rational thinking. The conflict is mediated symbolically.

Not just the early three reelers, but all gaming machines are the product of material and ideological forces. The emphasis in this paper is the way in which gaming machines are shaped by a clash of social forces resulting in a symbolic compromise. These symbolic compromise formations share features in common with symbols of cultural mythology and ideology as well as symbols of the individual imagination. The slot machine that doubles as the gum-vending machine, the mythological Minotaur and the imaginative feat of the woman who dreams of her lover looking a bit like Brad Pitt are all examples of condensation (Freud 1900), or the superimposition of elements in the service of contradictory impulses. Campbell (1949) notes the role of symbolism in myths and films in serving to paper over social contradictions:

In the United States there is...a pathos of inverted emphasis: the goal is not to grow old but to remain young; not to mature away from the Mother but to cleave to her. And, so, while husbands are worshipping at their boyhood shrines, being lawyers, merchants, or masterminds their parents wanted them to be, their wives, even after fourteen years of marriage and two fine children produced and raised, are still on the search for love- which can come to them only from the centaurs, sileni, satyrs and other concupiscent incubi of the rout of Pan, either...in dreams or as in our popular, vanilla-frosted temples of the venereal goddess, under the make-up of the latest heroes of the screen (p.11-12)

**The Liberty Bell**

Slot machine producers also know, intuitively or explicitly, that they must accommodate several contradictory currents in society. The Liberty Bell slot machine doubling as a chewing gum dispenser was born out of an environment where pro-gambling social forces such as technological innovation, the California gold rush, commercial interests and everyday faith in luck clashed with anti-gambling social forces such as the temperance movement, the policy of Prohibition, desire to protect the young from experiences beyond their developmental level, and rational resistance against fantasy gratification. The conflict is mediated by the production of a hybrid machine with fruit symbolism and patriotic symbolism. What better way to fight the gambling regulation lobby than to clothe a slot machine with a grand symbol of American freedom such as the Liberty Bell?

The original Liberty Bell is a 3.6 metre in circumference bell commissioned by the Pennsylvanian government and delivered to the US from London in 1752. It bears God’s words to Moses: “Proclaim Liberty throughout all the land unto all the inhabitants thereof” (Lev. 25:10). The name “Liberty Bell” was applied for the first time in an 1839 Abolitionist pamphlet. According to a (untrue) legend, it was rung on July 4 1776 to signal the adoption of the Declaration of
Independence. It cracked upon testing and was repaired. On a later occasion, when it was rung for George Washington’s Birthday in 1846, it cracked irreparably. Hence today it is never vigorously rung but lightly tapped. In 1915 the bell travelled to an exhibition to the West Coast, home of the Liberty Bell gaming machine. The cracked bell is described as “remarkably apt metaphor for a country literally cracked and freedom fissured for its black inhabitants” (www.ushistory.org/libertybell). One observation that could be drawn from the Bell’s history is that its social-symbolic utility is greater than its “practical” utility as a chiming device.

“Peripheral” Functions of Communication

The social-symbolic utility of language is often the focus of the disciplines of semiotics and psychoanalysis. These disciplines can help to recover some of the more “peripheral” purposes of language and symbols eclipsed by their work-a-day task of communicating thoughts and states-of-affairs, which is variously termed the referential, representational, ideational or informative function (Halliday and Hasan, 1985).

Jakobson (1960) developed a system of classifying the various functions according to the dominant element in the chain of communication that is utilised in a particular instance of communication. A system such as Jakobson’s usefully reminds us that communication goes beyond the “transmission” of ideational or factual content. While communication is about the context or factual states of affairs, there are other functions communication fulfils: building relationships, persuading, venting emotion, playing with symbols. In each of these examples reference to states of affairs may be minimal. It is important to bear in mind that there is always a mix of elements even though one or more of the following elements are in the foreground:

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<th>Context</th>
<th>Communicator</th>
<th>Message</th>
<th>Audience</th>
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<tr>
<td>Communicator</td>
<td>Emotive</td>
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<td>Context</td>
<td>Referential</td>
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<td>Audience</td>
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Thus, if the focus of an act of communication is on the communicator, the emotive function usually dominates (as in the case of swearing). Jakobson’s schema can be applied to non-verbal
modes of communication. It enables us to characterise the design of the Liberty Bell as one where the conative and aesthetic functions dominate. In one sense the focus of the Liberty Bell is very much on the audience and on the message - the design itself. More precisely, the focus is on audiences - plural. Broadly speaking, the Liberty Bell “addresses” simultaneously those sectors of society that are for and those that are against gambling. By aligning the machine with the imagery of the Liberty Bell, a political “statement” is being made legitimising slot machines as part of the American way of life. It could be said that in this example, the aesthetic function serves the conative function. For a better understanding of functions being used to serve other functions a brief exploration of the work of some of the work of John Searle is in order.

The work of Searle (1979), conceptualising indirect speech acts, leads to the notion of nested communicative functions; functions which serve other functions. For example a statement such as “I wonder what the time is right now” (describing a state of mind and thereby fulfilling the referential function) can be used in the service of the conative function; requesting information from the addressee or audience. In that example, the nesting of function within another function is governed by convention. It is polite to make requests indirectly and there are conventions about ways of enacting this politeness in communication.

In the case of the Liberty Bell, the aesthetic function could be said to serve the conative function. A design that gratifies the aesthetic sense serves the goal of persuading the audience to insert their coins into the machine. There can also be nesting of similar functions. The gambling consumer is persuaded to insert his or her coin (primary function) by first being persuaded that gambling is as much part of the American way of life as liberty and democracy (secondary function). Both functions are persuasive.

Consider the indirect speech act “Can you pass the salt?”. Here a request for service (“pass me the salt”) is nested or embedded in a request for information (“are you physically capable of passing the salt”). The ultimate goal is to get service but the proximate goal is a request for information. A conventional code allows us to interpret the request for information as a request for service. Knowledge of the politeness code allows us to arrive at an understanding of the speaker’s ultimate goal even though only the proximate goal has been expressed.

Now compare the request for salt example with the example of the Liberty Bell. In the case of the Liberty Bell, there are also proximate communicative goals: to create aesthetic pleasure and to legitimate gambling by aligning it with values of freedom and democracy. The ultimate goal, of course, is to persuade consumer to part with their dimes. However, there is no conventional link between proximate and ultimate goals in this case. The communicator’s (machine vendor, designer and manufacturer) ultimate goal is transparent but the link between this goal and the proximate goals of pleasing the audience with the design and appeasing them with ideological legitimation is opaque. Instead of convention linking these functions, there is only contiguity. Fraser (1922) identified relationships of contiguity and similarity as being the central in understanding the magical thinking of “primitive” peoples. Yet these are very important in “advanced” cultures too, going beyond isolated superstitions and animistic overtones in religions. Anything “cloaked in the American flag,” whether is be an idea, concrete thing or person, is liable to the contagious or halo effect of a national flag or other such symbol.

In one sense there is a tremendous difference between the indirect requests “Can you pass the salt?” and the invitation to play embodied by a machine like the Liberty Bell, a difference which goes beyond the superficial fact that a request and an invitation are different communicative acts. A more profound difference is that the language request is made up of building blocks (phonemes), which are themselves without meaning, whereas the invitation offered by the Liberty
Bell cannot be reduced to meaningless elements. This difference has often been used to pronounce the impossibility of a semiotics that draws upon natural language as its model. However it does not preclude a linguistics that draws upon semiotics as its model.

Consider how easy it would be to substitute the verbal request to pass the salt with a non-verbal gesture. Linguistic and non-linguistic communication acts are in this sense interchangeable. When we consider the invitation offered by the Liberty Bell and the request made in “Can you pass the salt?” as communication acts, an even more interesting similarity can emerge. Consider the following parallel. The indirect request is forged from the conflict between the desire to meet one’s needs and the desire not to offend others in doing so. The resulting speech act is simultaneously a request for information and a request for service. In a parallel sense, the Liberty Bell simultaneously offers the consumer the option of buying gum and gambling simultaneously.

Films about gambling provide a further arena to illustrate the richness that comes from an analysis that assumes the multiple functions of symbols. Consider, for the purposes of comparison, an approach to film that is limited to the representational function of communication. Dement (1999) for example assesses films about gambling according to the degree which they accurately or inaccurately they represent reality, and how well they promote consensual social goals. A problem with this approach is that it presupposes that film consumers are naïve and easily swayed by “irresponsible” or “unrealistic” films and that the content of the film will be directly injected into the mind of the viewer without any mediation or cognitive assessment.

Another problem with Demet’s approach is that it does not factor in the genre of the film. An example will make this clear. One of the many films classed as irresponsible by Demet is *Frankie and Johnny* starring Elvis Presley. In this film, Johnny, played by Presley, is a gambler/singer on a Mississippi riverboat. Frankie is his girlfriend. Presley has a string of bad luck until a gypsy fortune-teller informs him that he will meet a red-haired woman who will bring him luck. When he meets redheaded Nellie, his jealous girlfriend inadvertently shoots him “but he lives and sings” (Nash et al, 1985, p.930). Demet correctly notes the lack of realism in Johnny beating the roulette wheel, against long odds, several times in a row. On the other hand, the genre of musical comedy itself is not realistic. In every day life, people just don’t break out into song every ten minutes. The film could be interpreted as delivering the “message” that Johnny’s gambling wins are as fantastic and improbable as his plot entanglements, which could be interpreted as a responsible gambling message. Another possible interpretation is that Johnny is symbolically “punished” for dabbling in the occult (consulting a fortune-teller) by being shot as a result. This might in turn raise the ethical problem of the legitimacy of corporal (or any) punishment. A more subtle analysis might pose the question whether the depictions of gambling serve the function of driving the plot (the aesthetic function), informing about the world (representational function), persuading (conative function) or so on. Also relevant is the way that these functions are nested or subserve one another. For example, does the aesthetic function serve the conative function (as in some propaganda films) or does the conative function serve the aesthetic function. If Frankie and Johnny is primarily entertainment, then its dominant function is not to persuade us to gamble or not gamble. Rather, it is to persuade us to suspend disbelief.
Conclusion

Intrapsychic, interpersonal and individual conflicts are ubiquitous. Also common, but less evident, is the way some of these conflicts are mediated (simultaneously disguised and partially expressed) by means of language and symbols which are used to construct compromise formations. At the intrapsychic level we are constantly blessed (or besieged) with mixed motives. For example, on most mornings when I wake, part of me wants to go back to sleep, another part wants to go to work. A third part criticises me for being lazy. The internal critic is also known as the conscience in everyday language and the superego in the psychoanalytic model (Freud 1965). Berne (1964) called it the critical parent, and cognitive therapists call it a negative self-schema (Williams 1996). Behaviourally oriented thinkers might call it approach-avoidance conflict.

Symbolically mediated conflict expresses itself at an interpersonal level too. As I have discussed, in every day conversation, the conflict between requesting information and not wanting to appear too demanding is mediated by the indirect or polite question. For example, “Can you direct me to Oxford Street?” is a compromise between “Direct me to Oxford Street” and demanding nothing at all. Finally, the example of the Liberty Bell showed the same principle in operation at a social level. Its hybrid nature as gaming machine, patriotic symbol and chewing gum dispenser is a symptom of underlying social conflict between pro and anti-gambling forces. While the Liberty Bell is now an antique, the challenge of symbolically mediating social conflicting social forces is ever present. As Abrams (1999) states, “…slot machine design is the result of a complex equation of mathematics, casino real-estate economics, demographics, state regulations and popular culture” (p.59).
References


Disputing the “crack cocaine of gambling” label for electronic gaming machines

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Abstract

Electronic Gaming Machines (EGM’s) have been alleged to be the “Crack Cocaine” of Gambling, a highly addictive form of entertainment that has a small number of players accounting for most of the play and revenue. EGM play is also portrayed as having the highest rate of “problem gambling” among its users. At the time of this paper’s publication, the Australian State Governments are pursuing strategies to restrict EGM access on land-based facilities while the Federal Government has imposed a ban on EGM games for online use by those living in Australia. However, the bases for these charges and restrictions for play are of questionable validity. A reanalysis of The Productivity Commission survey data (1999) on Australians’ gambling shows that their pattern of play follows the Negative Binomial Distribution exhibited by most consumer package goods and forms of gambling, and that most other games had a higher proportion of “problem gamblers” among their players. Public policy toward EGM’s and Gambling needs to reviewed in light of these findings.

Introduction

A recent survey found that 80% of Australians reported they had gambled in the last 12 months, 60% had purchased a Lotto game and 44% had bought instant scratch tickets (Productivity Commission, 1999). Poker (“Pokies”) and other electronic gaming machines (EGM’s) are the next highest penetration of reported play with (36%) the gambling population.

Although EGM play doesn’t have the highest penetration of either the population or of “problem gamblers”, it has been called the “Crack Cocaine of gambling” and the “distilled essence of gambling” (National Gambling Impact Study Commission, 1999) with much pressure focused on limiting its expansion in land based venues and barring it from an online presence. This paper
attempts to provide an empirically based marketing-oriented examination of Australian’s reported play of EGMs, and to compare it to other “acceptable” forms of gambling and non-gambling products. This will help more completely address the true nature of any threat of EGM play and the potential efficacy of public policy initiatives to curb its availability.

**Patterns of EGM Purchasing**

The November 1999 Productivity Commission report on “Australia’s Gambling Industry” notes the disproportionate amount of game purchase from a small number of players. However, the tendency for a few buyers to account for a large proportion of sales is a well-known and accepted phenomenon in marketing. It was first recognised in the early 1950’s with the consistent syndicated tracking of self-reported purchase of fast moving consumer package goods. The “80-20 rule of thumb” or “Phenomena of buyer concentration” (c.f., Anschutz, 1997) means that eighty percent of the purchases are accounted for by twenty percent of the buyers. In actual use, the proportion purchasing and amounts they account for varies and is a product of the penetration of use in the population and the average frequency of purchase (c.f., East, 1997). The disproportionate relationship between a small number of purchasers making most of the purchases appears quite normal in repeat purchase consumer goods (c.f., Ehrenberg 1988; East, 1997). In fact, deviations from this pattern are often used as measures of the efficacy of marketing activity.

Just as pre-post deviations from the expected pattern of sales can measure marketing activity, deviations from an expected distribution may also offer a means to establish where purchase is abnormal. For example, if the proportion of heavy gamblers (buyers) for a gaming category like EGM’s was larger than expected, compared to other products, then this may be an indicator of pathological purchase behaviour in a market of users (c.f., Mizerski, Mizerski and Miller, 2000).

Early work by Ehrenberg (1959) has developed into a paradigm based on the analysis of purchases that applies probabilistic laws to observed or reported strings of purchases. This area is now usually referred to as the study of Stochastic Preference. This class of models (c.f., Brocklett, Goldsen and Panjer, 1996) has generated broad acceptance among Marketing Science scholars (e.g., Morrison and Schmittlein, 1988; Wagner and Taudes, 1987) modeling repetitive choices, and has been successfully applied to a wide range of Consumer (e.g., petrol, detergents, instant coffee) and Business (e.g., aviation fuel) goods and services.

**Applications of the NBD to Gambling**

The major assumptions of the NBD (c.f., Morrison and Schmittlein, 1988; Wagner & Taudes, 1987) are that it is best used in product categories that have a single use or benefit, a stable market (approximately the same number of new purchases as purchasers who drop out of the market), and have an average repurchase frequency (among purchasers) of more than once a year (c.f., East, 1997). These criteria are consistent with the typical environment of frequently purchased consumer package goods in the mature stage of their product life cycle. These situations are also prevalent in most categories of gambling, yet models of Stochastic Preference have had very limited application to this category.

Only a few games offered by one US State Lottery have been investigated for NBD patterns (Mizerski, Mizerski and Miller, 2000; Mizerski and Mizerski, 2001). More recently, Mizerski, Miller and Mizerski (2001) reported on the purchasing of six number lotto, three number “Cash 3” and instant or “scratchies”. The data came from nine quarterly surveys of samples representing Florida residents. The surveys were cross-sectional in that a different sample of respondents was chosen for each survey.
The three games experienced a different ratio of participation/penetration, frequency of purchase and demographic profile of buyers. However, all three had a distribution of use, and amount of use by group, not significantly different from the NBD predicted distributions. In essence, these gamblers behaved like most buyers of other fast moving consumer packaged goods, and did so from no more than three months after the game’s introduction. This finding suggests that games of gambling would appear to reach maturity very quickly and thus show an NBD pattern of purchasing behaviour soon after their introduction.

An additional finding was that there were no significant (p>.05) differences between the demographic and select psychographic profiles of light and heavy users of the Lotto game. There were differences between players (users) of different games (three number and scratchies) and between users and non-users of a specific game. This phenomenon is often seen as another indicator of the NBD models “fit” of the data (Mizerski and Mizerski, 2001; Mizerski, Miller and Mizerski, 2001).

**Applying the NBD to EGM Purchase**

It may be argued that the reason the lotto game purchase conformed to the normal pattern of habit expected by the NBD is that there is little evidence of problem gambling and addiction with Lotteries (c.f., Productivity Commission 1999, p. 6.52). On the other hand, it is charged that EGM players have the highest share of “people with problems who favour that game” at 9.27% (Productivity Commission 1999, p.6.54), with the news media reporting ample anecdotal evidence of “addictive” behaviour caused by EGM play (Ellicott, 2001). This perception is a strong component in legislation to restrict access to EGM games.

**Method**

**Participants**

The total sample (n=10,632) of Australians responses collected by the Productivity Commission (1999 Report appendices) had only those who had reported gambling in the last 12 months used for further analyses to give a relevant population to apply the NBD. Using those who have shown a willingness to gamble (reported they gambled at least once in last year) provided a sample (n=8554) of the potential EGM purchasing population. Of this number (n=3088) 36.1%, had reported playing an EGM for money in the last 12 months, and would provide the level of penetration input data needed for fitting the NBD.

**Results**

EGM players reported an average of 15.04 times “playing Poker machines or gaming machines” in the last 12 months. Using the categorisation of no play (non-users), 1 to 5 (light users) and 6+ (heavy users) playing occasions used in previous gambling studies (c.f., Mizerski & Mizerski, 2001; Mizerski, Miller & Mizerski, 2001) the observed and NBD theoretical distributions for EGM play are shown in Table 1. The NBD predicted distributions were generated by the East (1997) software. The actual reported data suggest that approximately 19.7% of the relevant willing to gamble population (have gambled in the last 12 months), account for 91.2% of all EGM gambling occasions. But, is this disproportionate purchase behaviour different from what one would expect from any often repeated purchase or behaviour?
Table 1. NBD vs Observed Distribution of EGM Play

<table>
<thead>
<tr>
<th>Proportion of Players/Buyers</th>
<th>Observed</th>
<th>NBD Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Users</td>
<td>55.1%</td>
<td>55.1%</td>
</tr>
<tr>
<td>Light Users</td>
<td>25.2%</td>
<td>21.4%</td>
</tr>
<tr>
<td>Heavy Users</td>
<td>19.7%</td>
<td>23.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proportion of Sales</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Users</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Light Users</td>
<td>8.8%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Heavy Users</td>
<td>91.2%</td>
<td>92.7%</td>
</tr>
</tbody>
</table>

To test that proposition, the observed and NBD expected distributions were compared by applying a chi-square statistic (c.f., Morrison and Schmittlein, 1988) to the two sets of distributions (proportion of users and proportion of sales by user group). There were no significant differences (p<.05) in either comparison, so the NBD does provide a good “fit” to this data. Analyses that increased the cut-off for heavy use (e.g., 10 gambling occasions) also fit the expected NBD proportions with that cut-off value.

Comparing Problem Play of Games

The Productivity Commission Report (1999) uses several methods to evaluate the extent of potential problem gambling by game. As noted earlier, the overall penetration of Lotto in the population, whether adjusted for potential gamblers or not, is approximately 60%, while EGM play is 36.1% (see Table 2). The penetration of other games for the population of gamblers, and the penetration of “problem gamblers” among that games players is also reported in Table 2. “Problem gambling” is defined as a score of 5 or more on the Southern Oaks Gambling Screen (SOGS). Two measures that the Productivity Commission used are shown on the far right side of Table 2. The first, the “Problem with favourite game” is a measure that attempts to allocate unique blame for problem gambling. This is the statistic most often used to attack EGM’s as inherently the most dangerous in terms of its potential to generate “problem gambling.” However, both the SOGS measure, and the method to establish unique cause, is of questionable validity.

Table 2. Indicators of Possible Problem Gambling

<table>
<thead>
<tr>
<th>Game</th>
<th>All Gamblers</th>
<th>Problem Gamblers*</th>
<th>Continuous Adoption Rate</th>
<th>Problem with Favourite Game*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lotto</td>
<td>60.6%</td>
<td>5.6%</td>
<td>48.5%</td>
<td>0.28%</td>
</tr>
<tr>
<td>Scratch</td>
<td>44.0%</td>
<td>5.8%</td>
<td>14.5%</td>
<td>0.56%</td>
</tr>
<tr>
<td>EGM</td>
<td>36.1%</td>
<td>8.9%</td>
<td>11.06%</td>
<td>9.27%</td>
</tr>
<tr>
<td>Racing</td>
<td>22.7%</td>
<td>8.3%</td>
<td>14.2%</td>
<td>5.23%</td>
</tr>
<tr>
<td>Keno</td>
<td>15.2%</td>
<td>9.6%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Casino</td>
<td>7.7%</td>
<td>11.1%</td>
<td>2.42%</td>
<td>3.59%</td>
</tr>
<tr>
<td>Sports</td>
<td>5.5%</td>
<td>11.0%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Bingo</td>
<td>4.8%</td>
<td>12.0%</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

* Problem gambling = 5+ on SOGS measure of problem gambling
The SOGS measure has been extensively criticised as providing a misleading and inaccurate gauge of problem gambling (c.f., Dickerson, 1997), and is acknowledged to be a poor indicator by the Productivity Commission in their report. Nonetheless, the Productivity Commission used a slightly modified version of this measure, along with a question asking the respondent, “On what gambling activity have you spent the most money in the last 12 months?” This latter response was used to totally attribute the cause of problem gambling. This approach has several problems. First, the ability of the respondent to accurately attribute their “favourite” game was poor with many respondents incorrectly assigning most money expended. Second, there is a high co-morbidity with other game play, and with other compulsive behaviours (e.g., drugs, sex), so that cause and effect are not identifiable (Walker, Milton & Anjoul, 2000) or are non-recursive. For example, Miller and Marquass (2001) analysed Gold Coast clients of counseling services who reported problems with gambling. They found very high levels of reported co-morbidity with problem gambling (see Table 3). Cause and effect cannot be determined but attributing sole blame to one game is not supported.

Table 3. Co-Morbidity with Problem Gambling

<table>
<thead>
<tr>
<th>Co-Morbidity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Problems</td>
<td>81%</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>78%</td>
</tr>
<tr>
<td>Intrapersonal</td>
<td>82%</td>
</tr>
<tr>
<td>Family</td>
<td>49%</td>
</tr>
<tr>
<td>Physical</td>
<td>32%</td>
</tr>
<tr>
<td>Substance</td>
<td>24%</td>
</tr>
<tr>
<td>Employment</td>
<td>49%</td>
</tr>
<tr>
<td>Leisure</td>
<td>45%</td>
</tr>
<tr>
<td>Legal</td>
<td>28%</td>
</tr>
</tbody>
</table>

Source: Miller and Marquass (2001)

Finally, the measure of the continuous adoption rate is the ratio of the percentage of people who gamble in a particular form of gambling on a weekly basis to the percentage of people who gamble on this format (over the last 12 months). This is supposed to “indicate the extent to which people are potentially exposed to risk when playing a particular form of gambling.” When looking at the rates in Table 2, one should remember that online EGM’s are banned for Australians. Lottery games, racing and sports wagering were allowed to migrate online for Australians’ access.

Compared to reported EGM play, the Lotto and scratch games have a much higher overall penetration and continuous adoption rate (4.38 times higher). This is dismissed by the Productivity Commission because they feel the Lottery products are a “low risk form of gambling” (Vol. 1, p. 6.53). Racing and sport wagering show an equal or higher percentage of “problem gamblers” than EGM games, and racing’s continuous adoption rate is higher or allegedly more dangerous.

Finally, the Productivity Commission has reported that increases in access, and therefore penetration, will increase the incidence of “problem gambling.” However, if one looks at the penetration (percent of gamblers who play) of each game, compared to that game’s penetration of problem gamblers, an inverse relationship between the two is exhibited (Table 2). The higher the penetration, the lower the percent of problem gamblers among those playing the game. Opening
up Internet access for gambling like wagering would appear to ignore this clear finding and apparent contradiction in the present ban legislation.

Summary and Conclusion

Using the Productivity Commission’s 1999 survey data, the analyses showed that self-reported EGM play fits the NBD model like other forms of gambling such as Lotto, as well as other consumer package goods. Using this measure, the disproportionate distribution of users accounting for most of the sales appears quite normal and expected.

Comparing reported EGM play to other games that are judged to be less of a problem by the Productivity Commission (Lotto, racing, wagering) shows EGM play to have fewer problem gamblers and less of a threat on many analyses. Finally, the mantra that EGM access will increase problem gambling vis-a-vis other games is not necessarily correct. There is a negative relationship of a games penetration of use in a population with their percent of problem gamblers.

Given the apparent strong effect of habit driving gambling (as with other fast moving consumer package goods), public policy should rethink their actions to ban only certain forms of gambling and the use of warning labels, education and more advertising campaigns. Research on the effectiveness of promotion to change habitual choice in the marketplace (c.f., Barnard & Ehrenberg, 1997) suggests little influence in this task. The usefulness of warning labels for changing habit is also in question.
References


National Gambling Impact Study Commission, Washington, D.C.


A pathways approach to treating youth gamblers

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Abstract
The Pathways Model of pathological gambling (Blaszczynski, 1998; Blaszczynski & Nower, 2002) is the first conceptual theoretical model of gambling to incorporate the multiple biological, psychological, and ecological variables contributing to the development of pathological gambling and to refute the assumption that pathological gamblers form one, homogenous population with similar psychological principles applying equally to all members of the class. The purpose of this paper is to adapt the Pathways Model to the treatment of youth gamblers. The model proposes that individuals follow one of three distinct pathways in becoming problem gamblers. These pathways lead to three distinct groups: (a) behaviourally conditioned problem gamblers, (b) emotionally vulnerable problem gamblers, and (c) anti-social impulsivist problem gamblers. The empirical literature indicates that the trajectory for these pathways typically begins in childhood or adolescence, suggesting significant implications for intervention and treatment with youth gamblers. Clinical treatment strategies for youth in each pathway are discussed.

Introduction
Pathological gambling among youth is a growing social concern. Studies suggest that 24% to 40% of adolescents gamble weekly, 10% to 14% are at risk for gambling problems, and 2% to 9% meet diagnostic criteria for pathological gambling. (For extensive reviews of youth gambling, see Griffiths, 1995; Jacobs, 2000; National Research Council, 1999; Shaffer & Hall, 1996). The mean prevalence rate for adolescent pathological gambling is 5% -- three times the 1.5% average for adults (National Research Council, 1999).

Empirical findings in several studies suggest that gambling often begins at home, with youth modeling the betting behavior of their parents and/or other caregivers (Gambino et al., 1993; Jacobs, 2000; Ladouceur & Mireault, 1988; Wood & Griffiths, 1998). In addition, early involvement in gambling is highly predictive of gambling problems in adulthood (Griffiths, 1995;
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Jacobs, 2000). Both youth and adult problem gamblers typically experience significant adverse personal, familial, financial, professional and legal consequences (National Research Council, 1999).

The literature is replete with studies exploring risk factors that appear to predispose youth to gambling problems. Those factors include earlier age of onset, male gender, parental gambling, predisposition toward intensity seeking and impulsivity, depression and/or anxiety, comorbid substance abuse, antisocial behavior, low self-esteem and lack of social support (Gupta & Derevensky, 1998a; Wynne, Smith & Jacobs, 1996; Vitaro, Arseneault & Tremblay, 1997; Vitaro, Ladouceur & Bujold, 1996). However, to date, no empirically validated theoretical model of pathological gambling effectively incorporates the complex array of biological, psychological, and ecological factors into an aetiological framework for youth gamblers (Blaszczynski, 1999; Brown, 1988; Ferris, Wynne & Single, 1998; Shaffer & Gambino, 1989). Furthermore, no model adequately explains why youth sharing common risk factors report different levels of problem gambling.

The Pathways Model (Blaszczynski, 1998; Blaszczynski & Nower, 2002) provides such a framework, suggesting that gamblers follow distinct pathways toward the disorder, depending on a multifaceted constellation of factors. The combination of both risk and protective factors differentially influence youth but may otherwise display similar phenotypic features. The purpose of this paper is to adapt the Pathways Model to youth gamblers, positing a template for early intervention and prevention strategies, and implications for appropriate clinical management.

Theoretical Framework of the Pathways Model

Historically, there has been little consensus regarding classification of problem and pathological gamblers. In the youth gambling literature, classification schemes have included symptom count alone (Gupta & Derevensky, 1998b), frequency of gambling plus symptom count (Vitaro, Arseneault & Tremblay, 1997), self-report of gambling-related problems (Stinchfield, Cassuto, Winters & Latimer, 1997), frequency of gambling plus money wagered (Vitaro, Ladouceur & Bujold, 1996) and multifactorial assessments (Govoni, Rupeich & Frisch, 1996). Some researchers have suggested that the presence of harm rather than symptom count should define a problem with gambling (Ferris, Wynne and Single, 1998; Victorian Casino and Gaming Authority, 1997).

In many cases, classification systems result from subjective value judgments, increasing Type I error and expanding the pool of problem gamblers by misclassifying those for whom gambling is ego-syntonic with those for whom gambling is ego-dystonic (Blaszczynski & Nower, 2002; Walker, 1998). In the former group, gamblers report no impaired control though they experience interpersonal friction or other difficulties as a result of spending excessive time or money or neglecting family or work obligations. The latter group experiences negative consequences as well as a subjective sense of impaired control, defined by repeated unsuccessfully attempts to control the urge despite a genuine desire to cease gambling. Merging these two very different types of gamblers into a single, heterogeneous group fosters confusion and contradiction in the research and clinical treatment literature (Blaszczynski & Nower, 2002). In fact, there is little agreement on typologies beyond the view expressed by Jacobs (1986) and Blaszczynski, Winter and McConaghy (1986) that there are at least two subgroups of gamblers: one chronically understimulated and the other, overstimulated.

While accepted theories of pathological gambling postulate different explanations for impaired control, they each maintain that one model and set of theoretically-driven treatment applies to all
pathological gamblers (Blaszczynski & Nower, 2002). However, no theory successfully accounts for all permutations of problem gambling behavior. For example, learning theories, based on behavioral schedules of reinforcement, fail to account for the majority of gamblers who continue to exhibit control, while cognitive theories fail to provide empirical data demonstrating that distorted and irrational cognition are causative factors rather than merely secondary effects of cognitive dissonance (Blaszczynski & Nower, 2002).

Conceptually, pathological gambling is perceived either as an endpoint along a continuum of gambling involvement or as a categorical disorder. The dimensional view holds that pathological gamblers are qualitatively similar to other gamblers except for the amount of time and money spent gambling, identified by an arbitrary cut-off point along a continuum of involvement (Walker, 1992). In contrast, the categorical perspective maintains that pathological gamblers are distinctly different from their non-impaired counterparts (Bergler, 1958; Rosenthal, 1992).

Increasingly, converging lines of research have begun identifying affective (Beaudoin & Cox, 1999; Blaszczynski, 1988; Jacobs, 1989), biochemical (Carrasco et al., 1994; Moreno, Saiz-Ruiz & Lopez-Ibor 1991) and genetic (Blum et al., 2000; Comings et al., 1996) subtypes of gamblers, supporting a categorical approach to classification and tentatively linking receptor genes and neurotransmitter dysregulation to reward deficiency, arousal, impulsivity and pathological gambling. Preliminary evidence supports the hypothesis that serotonin (mood regulation), norepinephrine (mediating arousal) and dopamine (reward regulation) may all play a role in impulsivity, mood disorders, and impaired control (Bergh et al., 1997; DeCaria et al., 1996; Lopez-Ibor, 1988; Moreno, Saiz-Ruiz & Lopez-Ibor, 1991; Roy, De Jong & Linnoila, 1989). In addition, genetic research suggests that possession of the dopamine D2A1 allele receptor gene results in deficits in the dopamine reward pathway, leading affected individuals to engage in pleasure-generating activities, putting them at high risk for multiple addictive, impulsive and compulsive behaviours, including substance abuse, binge eating, sex addiction, and pathological gambling (Blum et al., 2000; Comings et al., 1996). Thus, in some sub-group of problem and pathological gamblers, detrimental pleasure seeking may be biologically proscribed, though the choice of behavior differs across individuals (See Blaszczynski & Nower (2002) for a discussion of biological correlates.).

The Pathways Model (Blaszczynski, 1998; Blaszczynski & Nower, 2002) proposes at least three subgroups of problem and pathological gamblers with distinct clinical features and aetiological processes. “Behaviourally-conditioned” problem gamblers, Pathway 1, lack psychiatric pathology but fall prey to a highly addictive schedule of behavioural reinforcement. “Emotionally vulnerable” problem gamblers, Pathway 2, manifest biological and emotional vulnerability to pathology, characterised by high levels of depression and/or anxiety and a history of poor social support, low self-esteem, and emotional neglect by caregivers. The third group, “antisocial impulsivist” Pathway 3 problem gamblers, possess similar vulnerabilities to those in Pathway 2, but they are impulsive, anti-social and, typically, dually addicted.

**A Pathways Model of Youth Gambling**

**Common Processes: Access, Availability, Acceptability, Conditioning & Cognitions**

The Pathways Model asserts that each of the three major pathways leading to pathological gambling share certain processes and symptomatic features in common. However, pathways are distinguished by empirically testable differences in vulnerability factors, demographic features, and aetiological processes. This paper postulates that the biological, psychosocial, and environmental factors described in the literature can be effectively incorporated into a theoretical framework to explain youth gambling behavior.
All three pathways share common ecological factors: access to and acceptability of gambling. Epidemiological surveys indicate that access to gambling facilities is associated with a higher incidence of pathological gambling (Abbott & Volberg, 1996; Grun & McKeigue, 2000; Volberg, 1996). Both retrospective studies with adults and youth gambling studies have consistently reported that the average problem gambler begins gambling before the age of ten (Dell, Ruzika & Palisi, 1981; Griffiths, 1990; Gupta & Derevensky, 1997, 1998a). According to Jacobs (2000), the earliest gambling experiences among children occur in situations where there are opportunities to wager even small amounts of money, home environments facilitate and support gambling, and the rules of the game are framed within the child’s capacity to understand. In a survey of children ages 9 to 14, Gupta and Derevensky (1997) found that 81% of children surveyed gambled with family members, including parents (40%), siblings (53%), and other relatives (46%). Similarly, Ladouceur, Dube and Bujold (1994) reported that 40% of 1,320 children ages 8 to 13 gambled once a week or more, and a majority of those gambled with parents on lotteries (59%), cards (53%) and sports (48%). In the U.K., Wood and Griffiths (1998) found that 71% of 1,195 adolescents ages of 11 and 15 reported that their parents bought them national lottery tickets, and 51% said their parents bought them scratchcards. In addition, children of problem gamblers are at increased risk of developing a gambling problem themselves (Jacobs, et al., 1989).

Exposure to gambling at early age is facilitated by public policies and legislation that promote and encourage gambling as socially acceptable. In general, adults believe that youth gambling, particularly the purchase of lottery tickets, is a harmless and condoned activity (Gupta & Derevensky, 1997; Winters, Stinchfield, & Kim, 1995). In most venues, public policy and regulatory legislation create and foster an environment in which gambling is socially accepted, encouraged and promoted. Less than one third of 104 children ages 9 to 14 in one study reported they were fearful of being caught gambling, and the percentage tended to decline with age (Derevensky, Gupta & Della Cioppa, 1996). Similarly, Gupta and Derevensky (1997) reported that 44% of fourth graders feared being caught gambling but, by grade eight, that percentage reduced 10%. Wynne, Smith and Jacobs (1996) noted that an inordinately high prevalence rate of problem youth gambling may be due to four factors: 1) a dearth of diverse gambling venues, 2) vendors who fail to require proof of age, 3) advertising that tends to minimize potential harmful effects and 4) adult attitudes that minimize the dangers of youth gambling (Wynne, Smith, & Jacobs, 1996). Thus, access, availability, and acceptability function to foster youth gambling efforts.

The next process commonly applicable to all gamblers is the influence of classical and operant conditioning, which initiates and perpetuates an increasingly frequent and habitual pattern of gambling. (See Blaszczynski & Nower, 2002 for a discussion of conditioning). A neo-Pavlovian perspective suggests that repeated cortical excitation caused by gambling creates a “neuronal model” of the habitual behaviour, which is subsequently stimulated by gambling-related cues. Once triggered, there develops a compulsive drive to complete the habitual behavior, which counters resistance with an aversive state of arousal or compulsion. Similarly, intermittent wins, delivered on a variable ratio reinforcement schedule, produce states of arousal through operant conditioning; with repeated pairings, this arousal is also classically conditioned to stimuli associated with the gambling environment. The excitement of gambling also produces negative reinforcement by reducing prior-existing aversive anxiety states and depression. Such reinforcement fosters a habitual pattern of continued gambling.

Frequent gambling produces biased and illogical cognitive schemas, suggesting that personal control or skill, superstitious beliefs or biased evaluations about probabilities and odds will
influence the gambling outcome. (See Griffiths, 1995; Ladouceur & Walker, 1996 for a comprehensive review of these processes). These distorted cognitive belief structures increase in potency and pervasiveness with increasing levels of gambling involvement (Griffiths, 1990, 1995).

Ultimately, gamblers feel pressured to chase losses in the face of mounting debts (Lesieur, 1984). At this point, individuals typically manifest clear diagnostic indicators of gambling pathology.

**Pathway 1: Behaviourally-conditioned youth problem gamblers**

Pathway 1 gamblers develop gambling problems as a result of conditioning rather than impaired control caused by psychopathology forces (Blaszczynski, 1998; Blaszczynski & Nower, 2002). They fluctuate between the realms of regular/heavy and excessive gambling because of habituation, distorted cognitions about winning, and/or a series of bad judgements or decisions. Despite intermittently meeting formal criteria for pathological gambling, they are characterised by an absence of premorbid psychopathology. Essentially, as demonstrated in Figure 1, members of this subgroup may exhibit preoccupation with gambling and chase gambling losses. In addition, they may abuse alcohol and report high levels of depression and anxiety but only in response to the financial burden imposed by their behaviour: These symptoms are the consequence not the cause of their gambling excesses.

**Pathway 2: Emotionally-vulnerable youth problem gamblers**

Like the other pathways, this subgroup is initiated into gambling through the availability and acceptability of the behavior, which subsequently gives rise to conditioning processes and cognitive processes. However, these youth also present with premorbid depression and/or anxiety, low self-esteem, poor stress-coping and problem solving skills, familial neglect or abuse, lack of social support, and other adverse developmental variables. The cumulative effect of these factors produces the “emotionally vulnerable gambler,” who gambles as a way to decrease aversive affective states or meet specific psychological needs (Blaszczynski & Nower, 2002).

Several studies have implicated a family history of pathological gambling as a significant risk factor for youth (Jacobs, 1988; Gambino et al., 1993; Griffiths, 1995; Lesieur & Rothschild, 1989; Volberg, 1993; Wood & Griffiths, 1998). In one study, youth with parents identified as problem gamblers were three times more likely to be problem gamblers; the risk increased 12-fold when both parents and grandparents were problem gamblers (Gambino et al., 1993). Gupta and Derevensky (1998b) reported similar findings, reporting that pathological gamblers were significantly more likely than their peers to report a mother or father with a serious gambling problem. Apart from the powerful impact of modeling, children in such families are beset by feelings of pervasive loss, perpetuated by the physical loss of the gambling parent, existential feelings of emotional abandonment, loss of trust and safety, and physical deprivation and neglect (Darbyshire, Oster & Carrig, 2001). A family history of problem gambling may thus prove a powerful risk factor though, alone, it is insufficient to cause problem gambling in youth.

Jacobs (1986) has theorized that adverse life events, such as losses from a gambling parent, interact with personality variables and innately abnormal physiological states of arousal to lead to problem gambling. In his “General Theory of Addictions,” Jacobs proposes that pathological gamblers possess two interrelated sets of predisposing factors: abnormal physiological resting states of hyper (anxiety) or hypo-arousal (depression), and a history of negative childhood experiences that result in feelings of inadequacy, low self-esteem, and low self-efficacy. These
factors foster a need for wish-fulfillment and escape that lead the youth to seek chance encounters with substances or behaviors that promote dissociation and a feeling of being “alive” or “normal.” Gambling maintains this fantasy, transforming anxiety into excitement and depression into relaxation and a sense of overall well-being.

Gupta and Derevensky (1998a) tested Jacobs’ theory with 817 high school students in Montreal, Canada. The study employed multivariate statistics and structural equation modeling to explore each model construct: depression and arousal (physiological resting state), self-worth, apprehension and childhood happiness (psychological distress), dissociation (need to escape), and frequency and severity of drug, alcohol and cigarette use as well as gambling (comorbid addictive behaviors). As predicted, adolescent problem and pathological gamblers exhibited higher levels of anxiety and depression, escape through dissociation, and cigarette, drug and alcohol use than their peers. Dissociation proved a powerful predictor for both genders, however, male problem gamblers were further distinguished by excitability (overactivity), and females, by depressed mood and use of stimulants.

Pathway 2 gamblers display higher levels of psychopathology, particularly depression, anxiety, and substance dependence than those in Pathway 1. Females are likely to prefer low skill gaming devices such as slot machines and video poker, which provide stimulation without social interaction, while males are more likely to engage in table games and sports betting, which enhance social interaction and generate higher levels of arousal.

The youth gambling literature offers much support for this sub-group of gamblers, which occupies an intermediary position in severity among the pathways. Several studies have noted that youth who gamble problematically report lower self-esteem (Gupta & Derevensky, 1998a; Peacock, Day & Peacock, 1999), increased sexual activity (Stinchfield, 2000), higher rates of depression and anxiety (Gupta & Derevensky, 1998a; Stinchfield & Winters, 1998), a greater need to escape through dissociation (Kuley & Jacobs, 1988; Jacobs, 1993), poor coping skills (Nower, Gupta, & Derevensky, 2000), a lack of social support (Wynne, Smith & Jacobs, 1996), heightened risk of suicidal ideation and/or attempts (Gupta & Derevensky, 1998b; Stinchfield & Winters, 1998), and increased tobacco, drug and alcohol use (Volberg, 1993; Wynne, Smith, & Jacobs, 1996). Because of their negative developmental history and poor coping skills, Pathway 2 gamblers are often too fragile to maintain sufficient control over behaviour to engage in controlled gambling.

Figure 2 illustrates the essential differences between the first two pathways. Pathway 1 gamblers initially gamble for entertainment or socialisation, facilitated by access and availability. In contrast, Pathway 2 gamblers are emotionally vulnerable as a result of psychosocial and biological factors, and gambling serves as an escape from aversive affective states. Once initiated, a habitual pattern of gambling fosters behavioural conditioning and dependence in both pathways. However, Pathway 2 gamblers are more resistant to change due to premorbid psychological dysfunction.

Pathway 3: “Anti-social impulsivist” youth problem gamblers

Youth in Pathway 3 are replete with psychopathology that is often evident from childhood and suggestive of neurological or neurochemical dysfunction. Similar to Pathway 2 gamblers, this subgroup possesses both psychosocial and biologically-based vulnerabilities. However, this group is distinguished by features of impulsivity, anti-social personality disorder and attention deficit, resulting in severe multiple maladaptive behaviours and impulsivity that impair overall psychosocial functioning (Blaszczynski & Nower, 2002).
Clinically, impulsive youth engage in a wide array of behavioural risk taking and other misadventures wholly independent of their gambling behaviors. These youth often report a history of conduct disorder, sensation seeking, substance abuse, aggression, hyperactivity, and non-gambling related criminal behaviours. Impulsivity and disregard for consequences is aggravated during times of stress and emotional upheaval. Pathway 3 gamblers exhibit difficulty maintaining healthy relationships, report emotional, physical or sexual abuse or neglect by caregivers, and often endorse a family history of antisocial and alcohol problems. Gambling commences at an early age, rapidly escalates in intensity and severity, may occur in binge episodes and is associated with early entry into gambling-related criminal behaviours. Dubbed the “anti-social impulsivist” subtype, these gamblers are typically non-motivated and non-compliant with treatment interventions (Blaszczynski, Steel, & McConaghy, 1997). Figure 3 illustrates Pathway 3.

Several studies have reported that problem youth gamblers demonstrate elevated levels of impulsivity (Vitaro, Arseneault & Tremblay, 1997), sensation seeking (Powell, et al., 1999; Gupta & Derevensky, 1998a), substance use (Ladouceur, et al., 1999, Stinchfield et al., 1997) and antisocial behaviors (Vitaro, Ladouceur & Bujold, 1996; Winters, Stinchfield & Fulkerson, 1993). In a five-year longitudinal study of 154 boys, Vitaro, Arseneault and Tremblay (1999) found that early impulsivity, particularly the inability to foresee negative consequences and to cease acting when faced with negative consequences, was a significant predictor of problem gambling in late adolescence when controlling other personality factors like aggressiveness and anxiety. Similarly, other studies have noted that youth with serious gambling problems score high on the thrill-and-adventure-seeking, intensity-seeking, and disinhibition scales of sensation seeking measures (Gupta & Derevensky, 1998a; Powell et al., 1999). This tendency toward risk taking would account for the finding that youth who often play video games, which provide a high degree of neurological stimulation, are more likely than low-frequency players to be problem gamblers (Gupta & Derevensky, 1996).

These findings parallel similar results in the adult gambling literature, which has found consistent intercorrelations between impulsivity, antisocial behaviors, sensation seeking, boredom proneness, substance abuse and gambling (Gonzalez-Ibanez, Jimenez Aymami, 1999; McCormick, 1994; Steel & Blaszczynski, 1996).

It is likely that many youth in this pathway exhibit features of the hyperactive sub-type of attention deficit hyperactivity disorder (ADHD), which is characterised by impulsivity that commences in childhood and is often found in conduct disorder and antisocial personality behaviours. Youth gambling research has yet to systematically evaluate the relationship between ADHD and problem gambling. However, in a sample of adult pathological gamblers, Goldstein and his colleagues (Carlton et al., 1987; Goldstein et al., 1985;) found differential patterns of EEG activity and self-reported symptoms of childhood attention deficit disorder. Rugle and Melamed (1993) administered several neuropsychological measures of attention deficits to 33 male pathological gamblers and a similar number of normal controls. The authors concluded that childhood differences in behaviours related to overactivity, destructibility, and difficulty inhibiting conflicting behaviours distinguished gamblers from controls. Rugle and Melamed concluded that attention deficit-related symptoms reflecting impulsivity are present in childhood, before the onset of pathological gambling behaviour. This biological vulnerability weakens behavioural control not only in the domain of gambling but also in other areas of life. This gives rise to the hypothesis that impulsivity precedes and is independent of gambling, and functions as a good predictive factor for severity of involvement in at least a subgroup of gamblers (Blaszczynski & Nower, 2002).
In summary, Figure 4 illustrates the integrated pathways model: Gambling is initiated due to access and availability, proceeds through one of three distinct pathways, and ultimately converges at the level of classical and operant conditioning that fosters habituation, chasing, and problem and pathological gambling behaviour.

**Identification and Treatment**

Clinicians should employ a comprehensive assessment battery to identify and assign youth to one of the three pathways. Typically, the assessment should include a general gambling questionnaire exploring demographic variables, familial gambling behavior, age of onset, frequency and types of gambling, gambling locations, gambling cohorts, wagers, and cognitive perceptions about gambling (e.g., the Gambling Questionnaire by Gupta and Derevensky, 1996). All evaluations should include a lethality assessment for morbid thinking, suicidality and homicidality. In addition, assessments should be tailored to individual client needs, including assessment of some or all of the following:

- Youth gambling problem severity [e.g., DSM-IV-J (Fisher, 1992) or the SOGS-RA (Winters, Stinchfield & Fulkerson, 1993)]
- Personality and self-perception [e.g., High School Personality Questionnaire (Cattle, Cattle & Johns, 1984) and Self-Perception Profile for Children (Harder, 1985)]
- Depression [e.g., Reynolds Adolescent Depression Scale (Reynolds, 1987)]
- Impulsivity [e.g., the narrow impulsiveness subscale of the Eysenck Impulsivity Scale (Eysenck & Eysenck, 1977)]
- Sensation seeking [e.g., Sensation Seeking Scale (Zuckerman, 1994) or the Arnett Inventory of Sensation Seeking (Arnett, 1994)]
- Stress-coping [e.g., COPE (Carver, Scheier, & Weintraub, 1989) or Coping Inventory of Stressful Situations (CISS) (Endler & Parker, 1990)]
- Substance use and abuse [e.g., Personal Experience Screening Questionnaire (Winters, 1992)]

**Pathway 1 Youth Gamblers**

Entry into this pathway may occur at any age, possibly due to family or peer involvement in gambling activities and socialization that encourages magical thinking regarding luck, chance, and superstition. This subgroup of youth report the least severe gambling and gambling-induced problems of any of the three pathways, and manifest no significant symptoms of premorbid psychopathology, substance abuse, impulsivity, or disorganized behavior.

Identifying youth in Pathway 1 may be difficult. In studies of youth gamblers to date, much attention has been directed toward identifying common risk factors such as impulsivity and risk-taking. However, there has been no systematic investigation of youth who manifest no such pathology yet meet diagnostic criteria, reporting preoccupation, chasing, and frequent gambling of large amounts of money with significant consequences. In the adult population, Pathway 1 gamblers are often seniors or “empty nesters” who enjoyed relatively healthy lifestyles until life span milestones such as retirement or death or abandonment by a spouse left them lonely and in search of the fellowship and excitement satisfied by frequent trips to the casino. In youth, Pathway 1 gamblers are conspicuous by their absence of premorbid signs or symptoms: They may have intact, supportive families, obtain good school grades and excel in sports. However, peer or family influences introduce the Pathway 1 youth to the exciting and seemingly harmless sport of gambling, which initially provides an opportunity for excitement, testing skill or wits, peer bonding, and satisfaction for competitive drives. It is likely that these youth are identified only when the conditioning effects have become so resistant to extinction that they begin
borrowing, stealing, skipping school, failing classes, and manifesting other such symptoms characteristic of pathological gamblers in the throes of disorder.

Typically, these youth fluctuate between heavy and problem gambling and are motivated to enter treatment and comply with instructions. It is proposed that counselling and minimal intervention programs benefit this subgroup. Successful treatments often employ cognitive-behavioral therapy and education to challenge distorted cognitions. When possible, supportive family members and peer supports should be invited to participate in the treatment plan. (See Gupta & Derevensky, 2000, for specific treatment interventions and techniques for youth gamblers)

Pathway 2 Youth Gamblers

Youth in this pathway are more easily identifiable. However, premorbid psychopathology makes this group more resistant to change and necessitates treatment that addresses the underlying vulnerabilities as well as the gambling behavior. Often depressed or anxious, youth in Pathway 2 may be mediocre or poor students who have little social support at home. Unless affectively withdrawn, they are typically eager to pursue peer relationships and engage in risk taking behaviors to be approved of and accepted. This tendency may sometimes result in conflicts with the law or school administrators, but the behaviors are the result of a desire for socialisation rather than an innate impulsiveness or disregard for the rights of others. On standardized measures, they will report elevated levels of depression and anxiety, low self-esteem and self-efficacy, and familial patterns of neglect, abuse or abandonment. However, there will be no evidence of serious personality pathology. These youth may use or abuse substances, however, a thorough interview will reveal that such use is designed to escape unpleasant realities at home, counter feelings of anxiety or depression, combat issues of grief and loss, or ensure peer approval.

Treatment for Pathway 2 youth gamblers should be multi-modal, consisting of cognitive restructuring for disordered gambling-related cognitions and supportive therapy to address grief and loss issues. The clinician should devote significant effort to rapport and trust-building to ensure compliance and continued attendance. It is also necessary with this group to obtain a detailed familial history, identifying developmental deficits that may have manifested in behavioral pathology. If levels of depression and/or anxiety are elevated, the client should be referred for a psychiatric evaluation to determine the appropriateness of medication management. Likewise, substance abuse issues should be addressed with specialized treatment or attendance at a 12-step group when necessary. It is likely that Pathway 2 gamblers will display a lifelong inability to cope with stress in active ways. Instead, they will avoid stressors by mentally disengaging (gambling, watching television, playing video games) or physically disengaging (shopping, sleeping, partying) from stressors. For that reason, treatment should include assessment of stress-coping and problem-solving styles and re-education of active, problem-focused strategies.

Pathway 3 Youth Gamblers

These gamblers are the most difficult to treat. Compliance is typically poor and relapse rates are very high. Like Pathway 2 gamblers, their assessments will reveal a host of emotional vulnerabilities – depression, anxiety, suicidality, low-self esteem – and an extensive history of physical and emotional losses. Unlike Pathway 2 gamblers, this subgroup does not merely seek emotional solace from gambling but also craves high levels of arousal and intense stimulation, likely precipitated by a combination of biochemical or genetic deficits, personality pathology, and poor stress-coping and problem-solving skills. Gambling onset will be early, and they often present with a long history of anti-social and impulsive behavior and comorbid addiction,
particularly substance abuse. Motivation for treatment is low, so clinicians should focus initially on establishing a therapeutic alliance that offers some narcissistic reward for compliance (e.g., “get my parents off my back”).

Treatment strategies should be similar to those for Pathway 2. However, if it appears that biological correlates have contributed to the aetiology of the disorder, clinicians should attend to problems related to attention and organisational deficits, emotional lability, stress intolerance, and poor problem solving and coping skills. It is also important to highlight issues of compliance and attrition from treatment, since Pathway 3 gamblers are typically inconsistent, unreliable, and intolerant of boredom. These gamblers may require intensive, long-term cognitive behavioural treatment targeting impulse control and may benefit from group therapy, which fosters peer support for recovery. Like Pathway 2 gamblers, these youth may require medication to balance their neurochemistry and treatment for comorbid addictions.

Conclusion

In summary, the Pathways Model identifies clinically distinct subgroups of gamblers who exhibit common, overt cardinal symptoms, but, at the same time, differ significantly with respect to premorbid psychopathology, childhood history, and neurobiological functioning.

The model provides a conceptual framework that integrates research data and clinical observation to provide a structure to assist clinicians in identifying and separating distinct subgroups of gamblers that require differing management strategies. While all youth gamblers are subject to ecological variables, operant and classical conditioning and cognitive processes, differences between subgroups have significant implications for prognoses and treatment. Pathway 1 youth gamblers are essentially “normal” in character but simply lose control over gambling in response to effects associated with the prospect of winning. In contrast, Pathway 2 gamblers are characterised by disturbed family and personal histories, affective instability, and poor coping and problem-solving skills. They gamble as a means of emotional escape and mood regulation. Finally, Pathway 3 gamblers exhibit biological vulnerability toward impulsivity and arousal-seeking, early onset of gambling, attentional deficits, antisocial traits, and poor response to treatment. Identifying the appropriate pathway for youth gamblers should provide a practical and useful clinical guide that will ultimately improve the effectiveness of treatment interventions by refining diagnostic processes.
References


Figure 1. Integrated Model of Problem Gambling: Pathway 1

**ECOLOGICAL FACTORS**
- Increased availability
- Increased accessibility
- Increased acceptability

**CLASSICAL AND OPERANT CONDITIONING**
- Arousal/excitement
  - Subjective excitement
  - Physiological arousal
- Cognitive schemas
  - Irrational beliefs
  - Illusion of control

**HABITUATION**
- Pattern of habitual gambling established

**CHASING**
- Chasing wins, losses
- Losing more than expected

**PROBLEM AND PATHOLOGICAL GAMBLING**
Figure 2. Integrated Model of Problem Gambling: Pathway 2

ECOLOGICAL FACTORS
- Increased availability
- Increased accessibility
- Increased acceptability

BIOLOGICAL VULNERABILITY
- Biochemical
  - Serotonergic
  - Noradrenergic
  - Dopaminergic
- Cortical
  - EEG differentials
  - Biochemical
- Genetic

EMOTIONAL VULNERABILITY
- Childhood Disturbance
- Personality
- Risk taking
- Boredom proneness
- Mood Disturbance
- Depression
- Anxiety
- Poor Coping/Problem Solving
- Life stresses
- Substance use

CLASSICAL AND OPERANT CONDITIONING
- Arousal/excitement
- Subjective excitement
- Physiological arousal
- Cognitive schemas
- Irrational beliefs
- Illusion of control
- Biased evaluation
- Gambler’s fallacy

HABITUATION
- Pattern of habitual gambling established

CHASING
- chasing wins, losses
- losing more than expected

PROBLEM AND PATHOLOGICAL GAMBLING

Figure 2. Integrated Model of Problem Gambling: Pathway 2
**ECOLOGICAL FACTORS**
- Increased availability
- Increased accessibility
- Increased acceptability

**BIOLOGICAL VULNERABILITY**
- Biochemical
  - Serotonergic
  - Noradrenergic
  - Dopaminergic
- Cortical
  - EEG differentials
- Genetic

**EMOTIONAL VULNERABILITY**
- Childhood Disturbance
- Personality
  - Risk taking
  - Boredom proneness
- Mood Disturbance
  - Depression
  - Anxiety
- Poor Coping/Problem Solving
  - Life stresses
  - Substance use

**CLASSICAL AND OPERANT CONDITIONING**
- Arousal/excitement
  - Subjective excitement
  - Physiological arousal
- Cognitive schemas
  - Irrational beliefs
  - Illusion of control
  - Biased evaluation
  - Gambler’s fallacy

**HABITUATION**
- Pattern of habitual gambling established

**IMPULSIVIST TRAITS**
- Neuropsychological
  - ADHD
  - Impulsivity
- Anti-social behavior
- Substance abuse

**CHASING**
- chasing wins, losses
- losing more than expected

**PROBLEM AND PATHOLOGICAL GAMBLING**

*Figure 3. Integrated Model of Problem Gambling: Pathway 3*
Figure 4. Integrated Model of Problem Gambling:

- **ECOLOGICAL FACTORS**
  - Increased availability
  - Increased accessibility
  - Increased acceptability

- **CLASSICAL AND OPERANT CONDITIONING**
  - Arousal/excitement
  - Subjective excitement
  - Physiological arousal
  - Cognitive schemas
  - Irrational beliefs
  - Illusion of control
  - Biased evaluation
  - Gambler’s fallacy

- **HABITUATION**
  - Pattern of habitual gambling established

- **CHASING**
  - Chasing wins, losses
  - Losing more than expected

- **EMOTIONAL VULNERABILITY**
  - Childhood Disturbance
  - Personality
    - Risk taking
    - Boredom proneness
  - Mood Disturbance
    - Depression
    - Anxiety
  - Poor Coping/Problem Solving
    - Life stresses
    - Substance use

- **BIOLOGICAL VULNERABILITY**
  - Biochemical
    - Serotonergic
    - Noradrenergic
    - Dopaminergic
  - Cortical
    - EEG differentials
    - Genetic

- **IMPULSIVIST TRAITS**
  - Neuropsychological
    - ADHD
    - Impulsivity
  - Anti-social behavior
  - Substance abuse

PROBLEM AND PATHOLOGICAL GAMBLING
Gambling among older Greek Australians: Influence of illusion of control beliefs and risk-taking

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Abstract
This study explored (a) whether illusion of control beliefs and risk-taking predict problem gambling within the elderly Greek-Australian community, and (b) types of leisure activities associated with gambling. One hundred sixty-four elderly Greek Australians (67 males, 84 females, 13 unknown sex) completed questionnaires on demographic questions, a modified version of the South Oaks Gambling Screen (Lesieur & Blume, 1993), questions regarding illusion of control beliefs, risk-taking, and leisure activities. Backward multiple regression analysis found that illusion of control beliefs, risk-taking, and age together predict problem gambling (accounted for 23% of the variance). Factor analysis isolated 3 groups of leisure activities. Factor 1 comprised dances (.61), eating out (.59), talking on the telephone (.59), and gambling (.75). Factor 2 included a distinct group comprising going for walk (.76), reading/writing (.81), and artistic/craft hobby (.54). Factor 3 accounted for outdoor activities (.75), coffee shop (.56), and part-time work (.57). Based on risk-taking, sensation seeking, illusion of control beliefs, sex, and level of education, the discriminant analysis classified non-problem and problem gamblers with 84.3% accuracy. The results suggest that illusion of control beliefs and risk-taking propensity play a major role in the formation of problem gambling among the elderly Greek Australians.

Introduction
Gambling is a popular leisure activity in which people of all ages participate. Although gambling frequencies and problems are more prevalent in the younger age group, gambling in the mature-age group has been on the rise. Although the image of mature gamblers playing pokies at a local
club is ubiquitous in our mind, research literature on older gamblers in Australia is scarce. This paper investigated mature-age gamblers from a Greek background to find out (a) how Greek-Australian social club members spend their leisure time, and (b) what psychological factors differentiate recreational gamblers from dedicated, more frequent gamblers.

Profile of older gamblers

One of the few findings on older gamblers in Australia is included in a Victorian Casino and Gaming Authority (VCGA) (1997) report. In this study, questionnaires on the attitudes towards gambling were administered to older gamblers aged 55 and over. Percentages of older gamblers who endorsed the following statements (agree or strongly agree) are as follows: Older gamblers gamble for fun (60%), and they only gamble if it is part of a sociable event (45%), or they usually gamble just to be sociable (34%). However, for a third of the older gamblers, “Winning is the most important part of gambling” (30%). About a quarter of the older gamblers report “one of my main reasons for gambling is the challenge of beating the odds.” When older gamblers gamble, they usually expect to win (23%).

The older gamblers in the VCGA study disagree that they were enticed to gambling by free meals and other incentives that gambling venues offer (84%). Older gamblers think that they know the limit since “If they have more money, they won’t spend some of it through gambling (81%).” They are also realistic about gambling and friendship won’t mix. The majority of old gamblers in the VCGA survey do not think they can rely on friendship developed through gambling (80%). Some research suggests dysphoric mood such as loneliness and depression are predictive of gambling behaviour (e.g., Blaszczynski, Wilson, & McConaghy, 1986). However, the older gamblers in this survey deny that gambling won’t help them get over loneliness (79%). Based on their gambling attitudes, the general profile of older gamblers emerges as recreational gamblers who participate as part of social activities. However, this sample of older gamblers included those who place emphasis on winning and appear to have higher levels of illusion of control beliefs regarding gambling outcomes.

Overall, the importance of gambling as a leisure activity seems relatively low when compared to other leisure activities. Looking back 12 months, older respondents reported their main form of recreation or entertainment as gardening (48%), reading (46%), family associated activities (44%), walking (39%) and TV watching (37%), playing sports (23%), watching sports (21%), arts and crafts (20%), and shopping (18%). In contrast, only 6 per cent of the respondents identified gambling as a main form of recreation or entertainment. As a consequence, the estimated average numbers of hours per week spent on various activities also reflect they spent less time gambling compared to other types of recreation. The older gamblers in the VCGA sample spent an average of 28 hours per week watching TV whereas only 5.7 hours per week on gambling. However, the older people spent an average of $38.02 per week on gambling. In contrast, other more popular leisure activities such as gardening and watching sports cost them less than $10 per week. Not surprisingly, the leisure activity with the highest expenditure was shopping (average $101.96 per week). The Victorian Casino and Gaming Authority Report appears to present the view that older gamblers participate in gambling as part of a social activity but do so less frequently. However, more research is obviously needed before concluding that the majority of older gamblers are not at risk.

Older gamblers, compared to younger cohorts, may show stronger social desirability by modifying or editing their responses. The literature on help seeking in relation to problem gambling appears to endorse this view. Australian studies on profiles of clients who sought problem gambling counselling services consistently report that the older gamblers were under-
represented among help seekers who approached problem gambling services. For example, a
New South Wales study reported that problem gambling was more common among young people
(Dickerson, Baron, Hong, & Cottrell, 1996). This similar trend was also found in Victoria where
middle age groups (30’s and 40’s) over-represented help-seekers (Jackson et al., 1999). In
Tasmania, clients over 60 years old constituted only 5.5 per cent of gambling counselling service
users (Eckhardt, 1998). However, these statistics do not necessarily indicate mature gamblers are
not without problems related to gambling. In the United States, it is claimed that there is an
increased risk for 50-64 years old age group to develop problem gambling although such risks
decrease over 65 years old (Gerstein et al., 1999). Obviously, it is premature to argue that age is
a protective factor against problem gambling based on this single study. It is possible that the
decrease in problem gambling for the older age group may be due to lack of mobility with
increasing age.

Among the predictors of problem gamblers, illusion of control beliefs and propensity for risk
taking are known to be consistently reliable predictors of both gambling frequency and problem
gambling scores for youth (Moore & Ohtsuka, 1997, 1999). Although young people may have
different reasons for gambling participation as a “rite of passage,” similar individual differences
in personality traits and beliefs may be found in all age groups and effectively predict gambling
frequency and problem gambling in later years. In the current study, one of the aims was to find
out the reliable predictors of gambling and gambling problem among older gamblers; whether
these predictors of gambling and gambling problems for older gamblers are similar to younger
gamblers, and what is the most reliable information that helps us identify those who are at risk
among them?

Some research reports implicate more frequent incidence of problem gambling in specific ethnic
groups and subsequent social problems (Tran, 1999) or higher percentages of problem gamblers
in specific ethnic groups (Victorian Casino and Gaming Authority, 2000). Although the
percentages of participants scored at the range of possible problem gamblers for four ethnic
groups were substantially higher than the general population, small sample sizes and
methodological issues regarding random sampling technique somewhat limits generalisation
beyond these samples. Nonetheless, these research results seem to suggest that cultural factors
may affect at least in part, gambling behaviour and problem gambling. Needless to say, we need
more research data before we ascertain the extent to which cultural beliefs are associated with
gambling behaviour. Since there is little research on gambling of specific cultural groups (i.e.,
Blaszczynski, Huynh, Dumiao, & Farrell, 1998 for Chinese-speaking community), this research
would contribute to enhancing research on gambling of specific cultural groups – that is, Greek-
Australians, who are members of Social Clubs, from middle age to older age groups.

The aims of this research were (a) to investigate if illusion of control beliefs and personality
characteristics such as risk taking and sensation seeking predict problem gambling among the
older Greek-Australian gamblers, (b) to determine if the above predictors, in the absence of other
information, can be used as a basis for classifying problem gamblers and non-problem gamblers
within this group, and (c) to gain insight regarding how older gamblers gamble by analysing the
structure of leisure and recreation time allocation. There were three research hypotheses. It was
hypothesised that (a) illusion of control beliefs and risk taking predict problem gambling scores
within the older Greek-Australian social club members, (b) the successful classification of
gamblers at risk in this sample would be possible using illusion of control beliefs, risk taking and
age, and (c) most social club members participate in gambling as a social leisure rather than a
solitary activity.
Method

Participants

One hundred and sixty-four Greek-Australians (67 M, 84 F, 13 unknown sex) of whom 89 per cent were born in Greece, 5.5 per cent in other overseas countries. They were aged at least 50 years old or older.

Measures

The demographic section of the questionnaire recorded sex, age group, and education levels of the respondents. No names of respondents were required to ensure the anonymity of the participants. A modified version of South Oaks Gambling Screen (Lesieur & Blume, 1993), questions on illusion of control beliefs and leisure activity scales were adopted from earlier studies (Moore & Ohtsuka, 1997; 1999).

The South Oaks Gambling Screen (SOGS) was modified for the use in the Australian gambling jurisdiction. The English version is based on Duong and Ohtsuka’s (1998) version for Australian use, which was then translated into Greek by a qualified translator. Back translation was compared with the original English version to ensure accuracy of translation. This version includes a source of borrowing money from friends (a loan from a friend) in Question 16. See Duong and Ohtsuka (1998) for the need to include new items under Question 16 to assess the impact on the community and the families of gamblers. In order to make the cut-off score comparable to Lesieur and Blume (1993), the cut-off score of 6 was used to define probable problem gamblers.

The risk taking scale comprised five statements on risk taking preference. Participants rated their agreement on each statement using a 5-point Likert scale (strongly disagree =1, agree =2, not sure =3, agree = 4, and strongly agree =5). Higher scores on the Risk Taking Scale represent stronger risk taking preference.

The leisure activity inventory assesses frequencies with which participants engage in different types of leisure and recreational activities. Participants are to rate the frequency of participation in each type of fifteen leisure activities including gambling using 5-point Likert scales (Very often =1, Often = 2, Sometimes = 3, Rarely = 4, Never = 5).

Procedure

After obtaining the ethics clearance from the Victoria University Department of Psychology Human Research Ethics Committee, the second author contacted Greek social clubs in Melbourne and asked help from the club manager. Approximately 180 letters were mailed out. Out of 180, seven social clubs agreed to assist the distribution of questionnaire to club members at their regular meetings. The second author visited club meetings, distributed questionnaires to potential participants. Completed anonymous surveys were returned by mail or collected later by the researcher.

Results

Problem gambling Score (SOGS)

Table 1. Illustrates the distribution of South Oaks Gambling Screen scores in this sample.
Table 1. Distribution of South Oaks Gambling Screen Scores (SOGS)

<table>
<thead>
<tr>
<th>SOGS score</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>104</td>
<td>63.4</td>
<td>63.4</td>
</tr>
<tr>
<td>1</td>
<td>19</td>
<td>11.6</td>
<td>75.0</td>
</tr>
<tr>
<td>2</td>
<td>13</td>
<td>7.9</td>
<td>82.9</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>3.0</td>
<td>86.0</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>1.2</td>
<td>87.2</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>3.7</td>
<td>90.9</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>.6</td>
<td>91.5</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>1.2</td>
<td>92.7</td>
</tr>
<tr>
<td>9</td>
<td>2</td>
<td>1.2</td>
<td>93.9</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>1.8</td>
<td>95.7</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>1.2</td>
<td>97.0</td>
</tr>
<tr>
<td>13</td>
<td>2</td>
<td>1.2</td>
<td>98.2</td>
</tr>
<tr>
<td>14</td>
<td>1</td>
<td>.6</td>
<td>98.8</td>
</tr>
<tr>
<td>17</td>
<td>1</td>
<td>.6</td>
<td>99.4</td>
</tr>
<tr>
<td>18</td>
<td>1</td>
<td>.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Total 164 100

Using a non-standard cut-off score of 6 to account for an added item in Question 16, approximately 9.1 per cent of respondents were classified as possible problem gamblers. This figure was comparable to previously recorded percentage of possible problem gamblers in a Greek-Australian sample (Victorian Casino and Gaming Authority, 2000). However, a caution is required to generalise this finding to the general Greek-Australian population due to the nature of convenience sampling used in the current study.

**Prediction of problem gambling from illusion of control beliefs, risk taking and age**

A backward multiple regression analysis was carried out to ascertain the effectiveness of prediction of problem gambling from illusion of control beliefs, personality factors such as risk taking, sensation seeking, and demographic variables such age and education levels. Table 2 shows the summary of backward regression analysis.
A backward regression analysis indicated that illusion of control, risk taking, and age together significantly predict South Oaks Gambling Screen scores accounting for 23.9 per cent of its variance, $F(3, 127) = 14.63, MSE = 9.78, p < .0005$. These three predictors are statistically significant independent predictors of problem gambling scores. This result suggest that the information on illusion of control beliefs, risk-taking preference, and age contribute significantly to the prediction of problem gambling for this group, even in the absence of any other types of information.

To further test if such the classification of problem gambling status is possible, a step-wise discriminant analysis was used to ascertain the effectiveness as a classification tool. First, the participants who scored six or higher on the modified South Oaks Gambling Screen (SOGS) were classified as possible problem gamblers. Those who scored less than six on the SOGS were classified as recreational gamblers or non-gamblers. The step-wise discriminant analysis selected risk taking, age, and illusion of control as predictors and successfully classified problem gamblers and recreational/non-gamblers with 84.3 per cent accuracy rate (see Table 3). These results suggest that illusion of control beliefs, risk-taking preference, and age can be used to

### Table 2. Summary of Backward Regression Analysis for Variables Predicting South Oaks Gambling Screen (SOGS) score (N = 130)

<table>
<thead>
<tr>
<th>Step</th>
<th>Variables</th>
<th>B</th>
<th>SE B</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Education Level</td>
<td>-.56</td>
<td>.41</td>
<td>.11</td>
</tr>
<tr>
<td></td>
<td>Sex</td>
<td>-.11</td>
<td>.62</td>
<td>-.02</td>
</tr>
<tr>
<td></td>
<td>Sensation Seeking</td>
<td>-.003</td>
<td>.08</td>
<td>-.04</td>
</tr>
<tr>
<td></td>
<td>Risk Taking</td>
<td>.40</td>
<td>.09</td>
<td>.61**</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>-.54</td>
<td>.19</td>
<td>-.24**</td>
</tr>
<tr>
<td></td>
<td>Illusion of Control</td>
<td>-.21</td>
<td>.09</td>
<td>-.24*</td>
</tr>
<tr>
<td>Step 2</td>
<td>Education Level</td>
<td>-.58</td>
<td>.40</td>
<td>.15</td>
</tr>
<tr>
<td></td>
<td>Sensation Seeking</td>
<td>-.003</td>
<td>.08</td>
<td>-.04</td>
</tr>
<tr>
<td></td>
<td>Risk Taking</td>
<td>.40</td>
<td>.09</td>
<td>.62**</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>-.52</td>
<td>.18</td>
<td>-.23**</td>
</tr>
<tr>
<td></td>
<td>Illusion of Control</td>
<td>-.21</td>
<td>.09</td>
<td>-.25*</td>
</tr>
<tr>
<td>Step 3</td>
<td>Education Level</td>
<td>-.57</td>
<td>.40</td>
<td>-.11</td>
</tr>
<tr>
<td></td>
<td>Risk Taking</td>
<td>.38</td>
<td>.07</td>
<td>.59**</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>-.52</td>
<td>.18</td>
<td>-.23**</td>
</tr>
<tr>
<td></td>
<td>Illusion of Control</td>
<td>-.22</td>
<td>.09</td>
<td>-.25*</td>
</tr>
<tr>
<td>Step 4</td>
<td>Risk Taking</td>
<td>.37</td>
<td>.06</td>
<td>.57**</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>-.51</td>
<td>.18</td>
<td>-.23**</td>
</tr>
<tr>
<td></td>
<td>Illusion of Control</td>
<td>-.23</td>
<td>.09</td>
<td>-.27**</td>
</tr>
</tbody>
</table>

Note: Adjusted $R^2 = .23$ for Step 1; $R^2 = .006$ for Step 2 ($p < .05$); $R^2 = .005$ for Step 3; $R^2 = -.006$ for Step 4. * $p < .05$. ** $p < .01$. *** $p < .001$. 

A backward regression analysis indicated that illusion of control, risk taking, and age together significantly predict South Oaks Gambling Screen scores accounting for 23.9 per cent of its variance, $F(3, 127) = 14.63, MSE = 9.78, p < .0005$. These three predictors are statistically significant independent predictors of problem gambling scores. This result suggest that the information on illusion of control beliefs, risk-taking, and age contribute significantly to the prediction of problem gambling for this group, even in the absence of any other types of information.
identify those at risk in this sample even if no information is available on problem gambling scores.

Table 3. Classification Results by a Discriminant Analysis using Illusion of Control, Risk Taking, and Age as Predictors

<table>
<thead>
<tr>
<th>Classification Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predicted Group Membership</td>
</tr>
<tr>
<td>GSTATUS2</td>
</tr>
<tr>
<td>Original Count</td>
</tr>
<tr>
<td>% non problem gambler</td>
</tr>
<tr>
<td>% problem gambler</td>
</tr>
</tbody>
</table>

a. 84.3% of original grouped cases correctly classified.

Structure of leisure activities
An exploratory factor analysis was used to investigate how Greek-Australian Social Club members spend their leisure time and preference of leisure and recreation activities including gambling. A Varimax rotation method yielded three uncorrelated underlying factors that explain 51.6% of total variance. This result suggests that the essential information in a correlation matrix among leisure activities can be summarised in three underlying factors. Factor loadings, or correlations between leisure activities and underlying factors, were examined to determine the nature of three underlying factors. Table 4 shows factor loadings of leisure activities on 3 factors.
Table 4: Leisure Activity Time Allocation Structure Obtained by a Principal Component Factor Analysis (Varimax Rotation)

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>walk/jog</td>
<td>.228</td>
<td>.758</td>
<td></td>
</tr>
<tr>
<td>read/write</td>
<td>.137</td>
<td>.811</td>
<td>.119</td>
</tr>
<tr>
<td>art/craft</td>
<td>.536</td>
<td>.504</td>
<td></td>
</tr>
<tr>
<td>outdoor</td>
<td></td>
<td>.335</td>
<td>.749</td>
</tr>
<tr>
<td>visit friends</td>
<td>.322</td>
<td>.485</td>
<td>.469</td>
</tr>
<tr>
<td>go to coffee shop</td>
<td>.172</td>
<td>.150</td>
<td>.561</td>
</tr>
<tr>
<td>go to dances</td>
<td>.609</td>
<td>.324</td>
<td></td>
</tr>
<tr>
<td>go to gamble</td>
<td>.750</td>
<td></td>
<td>.134</td>
</tr>
<tr>
<td>eat in restaurants</td>
<td>.587</td>
<td>.269</td>
<td></td>
</tr>
<tr>
<td>fulltime/part-time work</td>
<td>.312</td>
<td></td>
<td>.566</td>
</tr>
<tr>
<td>involvement in club</td>
<td>.572</td>
<td>.383</td>
<td></td>
</tr>
<tr>
<td>talk on telephone</td>
<td>.589</td>
<td></td>
<td>.355</td>
</tr>
<tr>
<td>shopping</td>
<td>.562</td>
<td>.153</td>
<td>.383</td>
</tr>
<tr>
<td>concerts</td>
<td>.531</td>
<td>.492</td>
<td></td>
</tr>
<tr>
<td>others</td>
<td>-.221</td>
<td></td>
<td>.584</td>
</tr>
</tbody>
</table>


Factor 1 represented social leisure and recreation. This factor correlated highly with activities such as “go to gamble” (.75), “go to dances” (.61), “eat in restaurants” (.59), “talk on telephone” (.59), and “involvement in club activities” (.57). Gambling was clearly a social leisure activity for Greek-Australian social club members. Factor 2 formed solitary leisure and recreation activities such as “reading and writing” (.81), “walking/jogging” (.76), and “art/craft” (.54). Factor 3 could be labeled as outdoor recreation such as “outdoor recreation” (.75), “full- and part-time work” (.57), and “go to coffee shop” (.56). To summarize, gambling for this sample is a social activity not a solitary leisure.

Discussion

The results of this study supported Hypothesis 1. Illusion of control beliefs, risk taking, and age together predict problem gambling scores in a reliable manner. In particular, illusion of control beliefs of older gamblers is as effective as in the case for younger gamblers to predict problem gambling. Further, it is useful to investigate propensity for risk taking among older gamblers to identify those at risk since this information is found to be a reliable predictor as in the case of younger gamblers.

Hypothesis 2 was also strongly supported by the results. That is, a classification of problem gambling status was predicted accurately by illusion of control, risk taking, and age. Assessment of older gamblers, similarly for younger counterparts, should include appraisal of unrealistic expectation regarding gamblers’ ability or expertise to produce favourable outcomes in gambling as well as a propensity for seeking thrill and excitement.
The results of this study also provided evidence for Hypothesis 3. The analysis of leisure activities revealed that gambling for this sample was a social leisure activity, not a solitary recreation. This is positive news considering that social gamblers are less likely to develop signs of problem gambling. Although positive social support may also encourage people to participate in gambling (Moore & Ohtsuka, 1997), there is a possibility to develop a safety network or a “buddy” system to ensure excessive gambling would be deterred. However, one could argue that older gamblers who do not belong to social clubs or do not socialise to a great extent with others are the ones who are at risk.

As described in the procedure, it was difficult to approach and seek co-operation from social clubs. This reluctance may be in part due to the aversion against “negative” publicity to a closely-knit community, but it could also be a manifestation of strong social desirability among older respondents. If older respondents show higher social desirability, a true extent of gambling may not be fully disclosed to the researchers and the results may underestimate its prevalence. For this reason, further research is recommended to investigate the extent of gambling among older gamblers.

Although the majority of the participants showed few signs of problem gambling, approximately 9 per cent of the respondents were classified as possible problem gamblers. The use of convenience sampling in this study, however, imposes a limitation on generalising this result to a wider Greek-Australian community. Nonetheless, a similar figure was reported earlier in the Victorian Casino and Gaming Authority (2000) report on the impact of gambling on specific cultural groups. It is reiterated that culturally sensitive and methodologically sound research is required to investigate gambling and its impact on cultural and ethnic communities.
References


Culture and change: An account of a group program to help people with a gambling problem gain control of their gambling behaviour

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Abstract
This paper discusses the means by which a group program, modelled on the process of change as explicated by Prochaska and DiClemente, explores how personal culture relates to individual gambling practices and how group participants are encouraged to develop different beliefs, values and practices, allowing them to develop control over their gambling behaviour. Although there are differences in ethnic backgrounds, length of time in Australia, gender and, personal and family histories, there are common themes around the start, maintenance and development of their problem gambling behaviour. The following elements of the change process engaged in are described; exploration of the costs and benefits of changing and not changing gambling behaviour; clarification of the cognitive, emotional and behavioural processes that individuals engage in, prior to, and, whilst gambling; the development of ‘mindfulness’ of that process and of choice making; and the creation of new and constructive habits in response to stimulation previously leading to gambling, suiting individual characteristics and needs.

Introduction
‘Getting Even’ is a group program for people who want to gain control of their gambling behaviour. For some this means stopping and, for others, gambling less often, and only with what they can afford to lose. Most people who come into the group say they want to stop. During the course of the program people may realise the need to stop before being able to gamble in a controlled way. Participants are asked to define their goals for change. De Shazer (1985, 94) comments:

‘Since expectations help to determine the nature of subsequent events, it seems clear that the behaviour will change when the expectation changes.’
When a goal is defined, the expectation of a different, more satisfactory future starts to develop and behaviour changes in the present become possible.

In terms of DiClemente and Prochaska’s Cycle of Change (Miller and Rollnick, 1991, 15-18) the group seems to help people move their position foreword in the Cycle, or to consolidate an existing position. Participants come from a number of ethnic backgrounds, most commonly from Europe, the Middle East and South-East Asia. Men and women attend, ages ranging from 24 to 78.

The group runs over 8 weeks, on Thursdays, between 6.30 and 8.30, during school term time. Participants are asked to commit to attending all sessions.

In general the first part of each session is given to discussions about ways in which participants have been able to control their gambling, to talk about changes they have made in their behaviour, and to talk about episodes of gambling. Emphasis is placed on successes and actions that contributed to those successes. When talking about episodes of gambling emphasis is placed on learning that has been made, and positive differences from earlier episodes. Discussion takes around what could have been done differently. The second part of each session will focus on a particular topic.

The Group Program

The content of the program is built around J.O. Prochaska and C.C. DiClemente’s ideas about the process of change that occurs as we learn new habits. Content and the group process aims to build on participant’s desire and determination to change and to find practical alternatives to gambling.

Early sessions are devoted to the exploration of the costs and benefits of gambling, and the costs and benefits of controlling gambling. Clarifying the costs of their gambling and the benefits of change I see as building on desire to change. Looking at benefits of gambling and the costs of change give clues as to what might get in the way of them changing, and to issues that will need to be successfully resolved in different ways if change is to be successful. For example; feeling lonely and not having a place to go to if they stop gambling; not having a way of switching off the mind and all their worries if they can’t sit in front of a pokie machine; missing the excitement when life seems dull and mundane. There is focus on finding alternative ways of resolving these kind of issues. One of the beliefs underlying the program is that gambling is often a solution to trying to resolve difficulties and challenges peoples’ lives. The group aims to help people break the habit as well as address underlying issues as much as can be done in a group situation where time is limited. Individual counselling might be suggested as a way of resolving deeply rooted problems.

In finding ways to create new habits and new behaviours, and to leave excessive gambling out of their lives, time is spent exploring individual gambling patterns. This involves clarifying triggers that prompt a process of thinking, behaving and feeling that takes people in the direction of gambling, whether at the Casino, a local Pokie Venue or the TAB. The process of thinking, feeling and behaving is detailed to the point where a particular episode of gambling ends. Whilst a particular episode of gambling is taken as an example participants acknowledge the commonality in process between different episodes. The consequences of their episode are detailed. This fits with the costs of their gambling looked at earlier in the group. On going issues that contribute to the triggers having their particular importance and power in this ‘journey’ are also noted. Again these are issues that can become obstacles to change and will need to be resolved in more constructive ways. Getting clear about the steps along this ‘journey’, as well as providing a platform for looking at what needs to change, can also provide people with something
like a map of where they are in relationship to their gambling. It can alert them to dangers and times when preventative and alternative action is necessary.

When asked to give examples of what seems to prompt their movement towards a gambling venue, or to think of when they decide to go, participants sometimes say ‘it just happens’. For example, the car they are driving seems to know the way to their favourite venue and just takes them there. Their behaviour seems ‘robotic’ to them, with them having no sense of agency. Sometimes asking questions about what is going on can prompt reflection on their process and memory of it.

As well as using questioning as a way to develop greater awareness of their behaviour and cognitive and emotional process, some exercises based upon the work of Langer (1989) are used to help people develop ‘Mindfulness’ as she describes it. ‘Mindfulness’ is the opposite of ‘Mindlessness’ or what I think of as ‘roboticness’, of doing without awareness, acting automatically. We spend some time practicing being aware in the present. Being aware can give clues as to what needs to change and what the replacement behaviours etc. need to be. It can also alert people to the fact that they are engaging in the process that moves them towards gambling, and that it is time to take preventative action. For some people it provides the realisation that they have a choice as to what they do when they notice ‘being tempted’ to gamble.

Two other exercises involve focusing attention on breathing, on the breath coming in and going out. These extend the function of the ‘Mindfulness’ exercises. Whilst being aware of internal processes that habitually provoke movement towards gambling behaviour, the additional focus on breathing promotes a ‘standing back’ from these thoughts, emotions etc. They provide an opportunity to be aware without following up with further action that takes them in the direction of gambling.

Around this time comment is made about the desire to gamble, ‘the urge’ generally not being in consciousness all the time, that it comes and goes, and, that if you wait, it goes away. It may, and for this group does, return, but if you wait it will pass again. This is sometimes a thought that hasn’t occurred to people and something quite comforting. It can make the idea of doing things to distract the mind from focusing on the ‘urge’ more powerful and purposeful.

The use of questioning as a tool in helping participants reflect on their own experience, on change, on differences and on their agency, and as a means to aiding them develop solutions fitting with their circumstances and needs is central to the change process in this program (see Tomm, 1987a, 1987b, 1987).

The next step in the program is to explore alternative ways of responding to triggers, thinking and judgments that provide an ‘invitation to gamble’, behaviours that lead towards gambling and feeling and emotional reactions that seem to fuel this process. These alternatives become practices to enact and markers for changed habits.

At some point in the program we do something quite different. Participants are asked to create a song, a poem, a piece of dramatic action, or to produce a picture (using a choice of different materials), that gives expression to how life is when gambling is a part of it, and how life is, or will be, when gambling isn’t engaged in. The songs are sung, the poems read, drama enacted and picture talked to. It can be fun, moving, give people a taste of the future and cause some surprises. Participants are sometimes surprised that in 15-20 minutes they can do what they do. It sometimes gets people thinking about how else they might be creative and how they may be limiting themselves by thinking of themselves too narrowly.
Towards the end of the 8 weeks participants are asked to give form to, using modeling clay, aspect of themselves that they are proud of, that will be able to help them make the changes they want to make. This is something they can reflect upon.

One session is given over to talking about how to deal with ‘relapse’ or ‘slip-ups’, and in talking about its place in the cycle of change.

The remainder of the program, 1 or 2 sessions, is used to focus on topics of relevance to the group, usually looking at ways of constructively dealing with obstacles to change identified earlier on. This might involve looking at ways of managing stress effectively, at life planning, developing life goals, at successful financial planning, and dealing with grief. Topics change with the participants in a group.

Conclusion

Feedback indicates that participants have found the program useful. For some people this can mean helping them stop. For others helping them reduce their gambling leaving further work to be done. A challenge that we are aware of is how to maintain engagement with participants so that if they do relapse they feel able to recontact the service and maintain their process of change without increased damage to themselves and close others.
References


Abstract

This paper will present some of the major findings of a comprehensive CATI (Computer Assisted Telephone Interviewing) survey undertaken in South Australia (SA) in early 2001. Interviews were conducted with 6045 randomly selected adults aged 18 years and over (response rate 73.1%). Data were collected on the most common forms of gambling, the broad patterns of gambling, the prevalence of frequent and problem gamblers, and the associations between frequent and problem gamblers and other health indicators (smoking, alcohol mental health) and demographics (age, sex, ethnicity, location). Overall, 75.6% of South Australian adults had participated in at least one gambling activity in the past 12 months. The most common forms of gambling were Lotto or lottery games (61.2%) and poker or gaming machines (36.4%). Respondents were classified as frequent gamblers if they gambled at least fortnightly on a gambling activity other than lotteries or bingo. Overall 18.1% of respondents were classified as frequent gamblers. The social, demographic and health description of the frequent gamblers will be presented. Problem gamblers were identified using the South Oaks Gambling Screen (SOGS). The social, demographic and health indicators of the 2.0% of the adult population who were classified as problem gamblers will also be presented.

Introduction

Gambling Research In South Australia

The Gambling Research Reference Group was established to provide advice to the Gamblers Rehabilitation Fund Committee (GRFC) and the South Australian Department of Human Services
on the conduct and evaluation of research and pilot projects on gambling and related issues. The GRRG comprises representatives from the Department of Human Services, Universities, and non-government and community organisations.

The primary focus of the work of the GRRG is in the areas of problem gambling and harm minimisation, and effective prevention and intervention strategies that respond to the needs of problem gamblers, their families and the community.

Research conducted by the GRRG is funded through the Gamblers’ Rehabilitation Fund, a joint initiative of the Australian Hotels Association (SA Branch), Clubs SA, and the Government of South Australia, through the Department of Human Services.

The purpose of the South Australian Gambling Prevalence Study was to establish accurate baseline data to indicate the prevalence and patterns of problem gambling in this State for policy and planning purposes. The results of the study will contribute to appropriate targeting of services to assist problem gamblers. The report details the major findings of a comprehensive CATI (Computer Assisted Telephone Interviewing) survey undertaken in South Australia in early 2001.

**Methodology**

The gambling prevalence study was conducted via SERCIS (Social, Environmental and Risk Context Information System), which is managed by the Centre for Population Studies in Epidemiology. SERCIS is a flexible telephone monitoring system designed to provide high quality data on large samples of the South Australian population.

Interviews were conducted with 6,045 randomly selected adults aged 18 years and over (response rate 73.1%). Data were collected on the most common forms of gambling, the broad patterns of gambling, the prevalence of frequent and problem gamblers, and the associations between frequent and problem gamblers and other health indicators (smoking, alcohol consumption, mental health) and demographic characteristics (age, sex, ethnicity, location).

The modified South Oaks Gambling Screen (SOGS-M) was chosen as the measure of problem gambling to allow comparison of results with previous Australian and overseas surveys. The SOGS-M comprised 20 questions that were framed within a 12-month personal history (e.g. In the last 12 months, when you gambled, how often did you go back another day to win back the money you lost?). Similar to the Productivity Commission Report, a person was determined to have a serious gambling problem if they scored 5 or more.

In addition to the SOGS-M, participants were also asked to self rate the seriousness of their gambling problem on a 1 to 10 scale with anchor points of “not at all” and “serious”. Scores of 5 or more were considered to indicate self rating of a gambling problem.

General health was assessed using two self report questions; The first asked participants to rate their own health with a 5 item standard response scale (excellent to poor) and self-report any illness or health condition that has lasted or is likely to last for 6 months or more.

Personal alcohol risk was assessed by self-report consumption on a daily and weekly basis followed by categorisation. The responses were categorised according to the 1989 National Heart Foundation Risk Factor Prevalence study, which resulted in 6 categories; non-drinkers, no risk, low risk, intermediate risk, high, and very high risk.

Smoking behaviour was assessed via self reported smoking status (e.g. daily smoker, occasional smoker), time to first cigarette of the day, and the average number cigarettes smoked per day.
In order to assess mental health the Kessler Psychological Distress (KPD) Scale was administered. The KPD Scale is a 10 item scale developed to measure anxiety and depressive disorders with 5 choices per question ranging from “all of the time” to “none of the time”. Participants were asked to consider the last 4 weeks of their lives when answering questions. The scoring protocol was taken from the NSW Health Surveys (1997, 1998).

Finally the Suicidal Ideation Sub-Scale from the General Health Questionnaire was administered. The sub-scale consists of four questions relating to the past 4 weeks (e.g. Have you thought of the possibility that you might do away with yourself?).

Key Findings

In total, 75.6% of respondents had participated in at least one gambling activity in the past 12 months. The most common forms of gambling were Lotto or lottery games (61.2%) and poker or gaming machines (36.4%). The least common type of gambling was gambling on the Internet (0.9%).

Poker machines

Overall 36.4% of adults had gambled on poker and gaming machines and this activity was undertaken by equal proportions of males and females, with the greatest proportions coming from the younger age group (18-24 years) and those who had never married. Those on middle income of between $20,000 and $40,000 and those on an income of between $60,000 and $80,000 were also more likely to gamble on poker machines.

Frequent gamblers

Frequent gamblers were classified as those respondents who gambled at least fortnightly on a gambling activity other than lotteries or bingo. In total, 18.1% of respondents were classified as frequent gamblers (i.e. those who undertook a gambling activity or activities at least once a fortnight). This equates to approximately 176,000 South Australian adults who are classified as frequent gamblers.

Problem gamblers

Problem gamblers were identified using the South Oaks Gambling Screen (SOGS) and their rating of their gambling problem. Frequent gamblers were defined as problem gamblers if they scored 5 or more on the SOGS scale (1.9%) or if they rated their gambling problem 5 to 10 on a scale of 1 to 10 (0.1%).

In total, 2.0% of respondents were identified as problem gamblers. This equates to approximately 22,000 SA adults who are defined as problem gamblers. Problem gamblers were more likely to be:

- Aged between 25 and 34 years of age;
- Have never been married;
- Employed part time or be unemployed; and
- Live in a rented dwelling.
These respondents also demonstrated significantly higher rates of:

- Poor to fair general health;
- Smoking and alcohol use;
- Mental health issues than both frequent gamblers and the general population; and
- A significant rate of impact of gambling on their personal life.

There was also some evidence of psychological distress among problem gamblers, who were more than three times as likely to have contemplated suicide. Amongst those who reported suicidal ideation, 25% admitted that they had suicidal thoughts because of their gambling. The most common form of gambling amongst problem gamblers was poker machine gambling.

**Assistance**

All respondents were asked whether they were aware of advertising or other media that identified methods of assistance for those who gambled. Overall 43.0% of respondents could give the name of a gambling service that they were aware of. Gamblers Anonymous / Pokies Anonymous (23.0%) and the Gambling Help Line (19.2%) were the two most commonly identified services. Radio and television advertising were the most common source of information regarding these two services, with 72.8% of those recalling the Gambling Help Line from this form of advertising and 53.2% recalling Gamblers Anonymous / Pokies Anonymous.

**Other gamblers**

Respondents were also asked if they knew someone with a gambling problem. Overall 23.3% of respondents knew someone else who had a serious gambling problem, with 69.0% of these people experiencing their problems in the last 12 months.

**Summary**

In summary, the presentation of the results of the study into frequent and problem gamblers in South Australia provides a summary of prevalence of gambling and its social impacts within the South Australian community. It also provides some insight into the effects of advertising and provision of information relating to assistance for those people identified as problem gamblers.

The complete report is available for download from the following website:


An order form for hard copies of the report can be obtained by writing to the first author.
References


Using the KIO to measure psychological distress. In The Health of the People of New South Wales - report of the Chief Health Officer, Methods. Epidemiology and Surveillance Branch, NSW Health Department, Sydney.


Mechanisms Contributing To The Maintenance Of Problem Gambling

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Abstract
Coventry and Constable (1999) reported winning was related to arousal in fruit machine players in the UK. However, problem Electronic Gaming Machine (EGM) players may learn a different emotional response from continued exposure that is maintained regardless of winning or losing. It was hypothesized that the perceived outcome would be differentially related to anxiety in problem gamblers, and that the perception of winning would change according to the number of years gambling. Participants (N = 82) at five gaming venues across Melbourne completed the Spielberger State-Trait Anxiety Inventory and the South Oaks Gambling Scale (SOGS). Trait and state anxiety was measured before gambling, with state measured again after gambling. Participants also nominated the perceived financial outcome of the session. Anxiety increased after play for problem gamblers regardless of win or loss. The number of years playing was significantly different in problem gamblers than other gamblers and perceived win or loss was larger. This suggests that the concept of winning varies according to severity of problems, and changes over time as a result of gambling.

Introduction
Mechanisms Contributing to Maintenance of Problem Gambling

There have been numerous attempts to define a single personality or psychological dimension that could be linked to problem gambling (Dickerson & Baron, 2000). Studies suggest that people who develop a problem gambling have pre-existing problems. However, the search for an addictive personality has been relatively unsuccessful in targeting a single factor that leads to problem gambling. This has been due to a focus on more distal aspects of individual pathology rather than the identification of proximal mechanisms that function within-sessions such as gambling related cognitions and moods that may serve to maintain gambling. As described in DSM-IV, within-session events are characterized by an inability to cease gambling and gambling
to regulate mood. Investigating processes that maintain gambling encourages a paradigm shift away from a ‘problematic person’ to the mechanisms that lead to problem gambling.

Gambling behaviour can be seen as a continuum, ranging from gambling as a recreational activity, to a harmful obsession. Clinicians focus more upon the harmful outcomes at one end of this spectrum, rather than the mechanisms contributing to continuing play. The focus on pathological gambling in DSM-IV suggests a problematic person that is preoccupied by gambling activities, develops tolerance, has difficulty ceasing gambling, becomes restless and irritable when not gambling and gambles to chase losses (APA, 1994). In contrast, the Australian Psychological Society’s position paper on problem gambling describes it as a ‘chronic failure to resist gambling impulses that results in disruption or damage to several areas of a person’s social, vocational, familial or financial functioning’ (Blaszczynski, Walker, Sagris & Dickerson, 1999). Conversely, the language of EGM gambling implies that there is a safe limit and a safe way to gamble. The use of gaming to describe the act of gambling sends a message that people can play the ‘game’ for entertainment, and they may even win some money. Nevertheless, since there is no skill required for this game and the act of playing requires only the pressing of a button, there must be other factors that influence an individual’s decision to continue gambling. These may include a variety of short and long-term emotional responses that interact with the act of gambling.

Negative affect has been extensively associated with either the etiology of gambling or as a secondary response to gambling (Blaszczynski, McConaghy & Frankova, 1990; Blaszczynski, et al., 1997). Mood is commonly described as a frame of mind, a state of feeling at a particular time, which is usually a longer time than that described by affect, in this way mood is a trait, and affect is a state. As described in DSM-IV affect is ‘the subjective experience or expression of a feeling state (emotion)... [in] contrast to mood, which refers to a more pervasive and sustained emotional ‘climate’, affect refers to more fluctuating changes in emotional ‘weather’’. Response to EGM gambling has been shown to be both low positive and high negative affect such as depressed mood (e.g., Becona, Del-Carmen-Lorenzo & Fuentes, 1996; Getty, Watson & Frisch, 2000; McNeilly & Burke, 2000) and anxious state (Cocco, Sharpe & Blaszczynski, 1995; Coman, Burrows & Evans, 1997).

Anxiety is described as an unpleasant state or condition that is characterized by tension, nervousness and worry. It is a subjective evaluation of arousal that is an increase in the autonomic nervous system (Spielberger, Gorsuch & Lushene, 1970). While anxiety has been linked to gambling, anxiety can be considered to be an enduring personality trait or a transient emotional response. The level of Trait anxiety (T-Anxiety) suggests that Individual differences in T-anxiety predict the level of anxiety that relate to the frequency and intensity of past experiences of stimuli. It is enduring over time and is usually evoked by a particular stimulus. S-Anxiety is the physiological arousal and subjective interpretation of that arousal at a particular moment evoked by conditioned stimuli (Spielberger et al., 1970). State anxiety (S-Anxiety) is related to T-Anxiety in that the intensity of response to a stimulus is stronger when there are higher levels of T-Anxiety.

Arousal as a physiological reaction is insufficient to determine an emotional state (Schachter & Singer, 1962). Rather the event-related cognition determines the emotional reaction. This means that before and after gambling cognition’s determine the intensity of affect and that autonomic arousal is associated with conditioned cognitions to gambling related stimuli (Sharpe, Tarrier, Schotte & Spence, 1995). Sharpe and Tarrier (1993) suggest that arousal prior to gambling is interpreted as excitement that comes from the anticipation of winning. Indeed, it would seem strange to experience excitement for the prospect of losing. In fact, studies have found increases
in heart rate prior to gambling (Coventry & Norman, 1997) and according to bet size (Anderson & Brown, 1984) and anxiety (Leary & Dickerson, 1985; Coulombe, Ladouceur, Desharnais, & Jobin, 1992). Others have shown that the relationship between HR and the subjective interpretation of arousal has not always been supported (Coventry & Brown, 1993; Coventry & Constable, 1999).

This could be explained as EGM gamblers attempting to reduce subjective arousal by gambling. Cocco, Sharpe and Blaszczynski (1995) studied twelve problem poker machine players and thirteen horse race gamblers (aged 28-69 years). Participants completed a series of questionnaires that assessed levels of anxiety, their preferred state of arousal, and their motivations to gamble. As predicted, problem poker machine gamblers were more anxious and reported avoiding arousal more frequently than the horse race gamblers. Conversely, problem horse race gamblers preferred heightened levels of arousal and appeared to gamble to achieve these optimal levels of arousal.

The anxiety experienced may be an outcome of conditioning that leads to the anxious state and is altered through gambling within the session. EGMs operate on variable ratios together with intermittent positive reinforcement (Blaszczynski, et al., 1997; McConaghy, Blaszczynski & Frankova, 1991). It is through the gambling act itself that these intermittent reinforcement schedules become strongly secondarily reinforcing, where each loss gets the player closer to an anticipated win. Wins are experienced intermittently, and the player cannot easily determine the rate of reinforcement, as it varies significantly between losses. The resulting system of reinforcement includes continuous secondary reinforcement through increased arousal, contingent upon gambling, and a partial reinforcement schedule of monetary gain. Dickerson, Hinchy, Cunningham and Legg England (1991) suggests that persistence when losing and the duration of each gambling session differentiates problem gamblers from other gamblers. They suggest that gamblers learn a habitual mode of gambling that maintains gambling.

An operant conditioning perspective that simply focuses on wins and losses fails to consider other reinforcers such as arousal and affective factors (Griffiths, 1999). Indeed, Hodes, Cook and Lang (1985) argue that as autonomic responses are conditioned, these allow levels of arousal and subjective affect to be measured against schedules of reinforcement. It is therefore expected that the more years spent gambling the more likely an occasional gambler will develop a problem with gambling. This is supported by Grun and McKeigue (2000) who found an increase in problem gambling with exposure to gambling stimuli.

The conditioning that takes place while gambling may influence the level of anxiety experienced after the session has finished, such that conditioning may be independent of the financial status of the session. In a postal survey, Griffiths (1993) asked adolescents to rate their affective state while gambling. He concluded that mood changed from before, during and after gambling having asked participants to retrospectively report affect. Similar results were also found in a later study on adult gamblers (Griffiths, 1995). This indicates that gambling is a method of regulating mood that may not be dependent on financial outcome.

Nevertheless, the actual wins and losses within the session have been found to influence the style of play. Coventry and Constable (1999) found that arousal increased from baseline levels only for those participants that won during the session and that subjective arousal was not related to HR. Another study found that the number of wins during the session did not influence irrational thinking (Ladouceur, Gaboury, Dumont & Rochette, 1988). In fact, just the act of winning occasionally was enough to stimulate a perception of control. This suggests that the anticipation of winning or a positive financial outcome at the end of the session is important in stimulating
arousal and thus intensifying subjective affect. However, it would be expected that those who chase their losses are also experiencing anxiety.

This project seeks to ascertain affective mechanisms contributing to maintenance of problem gambling, by examining any affective responses in anticipation of, and in response to gambling, and as a function of conditioning. The rationale for the current study is that gambling is a conditioned behavior that leads to changes in state when gambling, independent of the financial outcome of the session. It is hypothesized that if pre-existing problems explain problem gambling, then those people should be more anxious on trait measures. If negative affect has a role, then gambling will be more secondarily reinforcing and there will be greater anticipatory response, which is greater state anxiety. If negative affect has a role, then reinforcement will have a greater influence on anxiety when the person has finished gambling.

Method

Participants

Five clubs and hotels in the western and south-eastern regions of Melbourne, Australia granted access for the present research on the condition that the venues remained anonymous. The venues had an average 58.2 EGMs (range 20-90). Participants were 35 males and 46 females ranging in age from 18 to 82 with a mean age of 40 (SD = 15.96). They were all customers at gaming venues from suburban Melbourne.

Materials

A questionnaire was developed to elicit demographic information (age, gender and years gambling) and outcome of the gambling session. A forced choice format was selected so those participants made a choice between a winning and losing session. The choice was ‘won more than expected’, ‘came out slightly ahead’, came out slightly behind’, ‘lost more than anticipated’.

The South Oaks Gambling Screen (Lesieur & Blume, 1987) was used to identify probable problem gamblers. It contains 16 questions that are based on the criteria for pathological gambling in the sixteen questions (four questions are not scored) contains 20 items. This yields a score out of 20 with a score of 5 or more being the criterion for classification as a probable pathological gambler (Lesieur & Blume, 1987). A reliability analysis for the scored items on the DSM-III-R and SOGS produced a Cronbach’s alpha coefficient of 0.90.

Spielbergers’ (1970) State Trait Anxiety Inventory (STAI) was used to measure state and trait anxiety. State anxiety is unstable and responsive to events that are experienced from day to day. Trait anxiety is relatively stable and reflects the anxiety proneness of an individual (Spielberger et al., 1970). The level of an individuals state anxiety is likely to be influenced by a stressor like gambling, if the situation is perceived to be threatening or dangerous. As outlined by Spielberger et al. (1970) the stronger that anxiety trait the more intense reaction to the perceived threatening situation. An individual’s reaction is influenced greatly by past experience. Therefore the STAI was deemed the most appropriate scale to measure state and trait anxiety levels.

The 20 items STAI asks participants to nominate how they are feeling ‘at the moment’ on state anxiety scale through indicating on the four point Likert scale from ‘not at all’ to ‘very much so’. The 20-item trait anxiety scale asks the participant how they ‘generally feel’ through indicating on a four point Likert scale never to almost always. A reliability analysis of the T-Anxiety for this study produced a Cronbach’s alpha of 0.88. The reliability analysis of the S-Anxiety produced a Cronbach’s alpha of 0.93.
Procedure

Five venues gave approval for the research to be conducted, representing southeast and western suburbs of Melbourne. The data collection was conducted over six weeks at various times. At two venues the data was collected on Saturday night between 6 and midnight, two venues on Friday night between 6.30pm and 11.00pm and at one venue on Sunday afternoon between 12.00 noon and 5.00pm.

A researcher was positioned in the foyer of the gaming venue. Customers who made eye contact with the researcher were approached, advised that participation was entirely voluntary and that all information given was confidential. The participation rate was 20%. Each participant completed the before-gambling questionnaire inside the foyer, and then took an envelope with them that contained the second part of the questionnaire to complete at the end of the gambling session. Each envelope was numbered with a corresponding digit to the questionnaire that had been completed. It contained a copy of the S-Anxiety form with an additional item that asked whether the participant perceived that they gained or lost during that session of gambling. Most of the participants completed the questionnaire in the foyer as they were departing, while some opted to sit inside the venue.

Results

The data was examined for incorrect entries and response bias and examined for univariate and multivariate outliers. Since several of the scales have a lower bound of zero, a positive skew was a possibility. One variable was log transformed. With the use of $p<.001$ criterion for Mahalanobis distance case 42 was deleted as its value was larger than 23.02. The variable years gambling underwent a logarithmic transformation, as it was severely skewed, all other transformations failed to reduce kurtosis. It was decided to not transform other variables that were not normal to maintain the integrity of the data (Tabachnick & Fidell, 1996)

The range of scores on the SOGS was 0-14 with a mean score of 3.72 ($SD = 4.17$). Participants were divided into three groups dependent on their SOGS score (Gambino, Fitzgerald, Shaffer, Renner, & Courtnage, 1993; Moore & Oshtsuka, 2000). This division allows analysis to occur between groups allowing for incremental differences. It is unlikely that a person would suddenly develop a gambling problem. Rather it is a continuum that progresses from no problem, mild or moderate then to problem gambling. Scores of 0 were defined as no gambling problems, score of 1-4 reflecting few or mild problems. Scores greater than 5 indicate that the participant is at risk for problem gambling. The score of five has been used as a cut-off point in most research (Leisure & Blume, 1987). In this study, 35.8% of participants had a score of greater than 5 as shown in Table 1.

Table 1. Most amount spent and percentage of gamblers in each SOGS group that gambled once a week or more on EGMs, horses or at the casino

<table>
<thead>
<tr>
<th>SOGS</th>
<th>N</th>
<th>$</th>
<th>EGMs</th>
<th>Horses</th>
<th>Casino</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 (no problem)</td>
<td>27</td>
<td>1-10</td>
<td>3.7</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>1-4(mild)</td>
<td>25</td>
<td>10-100</td>
<td>30.00</td>
<td>16.00</td>
<td>8.00</td>
</tr>
<tr>
<td>5+ (problem)</td>
<td>29</td>
<td>100-1000</td>
<td>70.80</td>
<td>13.80</td>
<td>17.20</td>
</tr>
</tbody>
</table>

The participants in this study have a higher than average SOGS score. This is to be expected due to the method of collecting participants. Most participants were at the venue to gamble and therefore this sample excludes members of the population that do not gamble. This is shown by the mean years gambling for the sample of $M = 6.14$, $SD = 5.77$, range 1-30.
Anticipatory Responses

The S-Anxiety before gambling had a mean of 30.47 (SD = 11.03), and a higher S-Anxiety after gambling (M = 40.60, SD = 15.46). A paired samples t-test indicated that there was a significant difference between S-Anxiety before and after gambling (t(66) = 8.147, p < .001). T-Anxiety was measured once prior to gambling (M = 35.30, SD = 8.99). The means for each SOGS group are depicted in Table 2.

Table 2. Means and standard deviations for T-Anxiety, S-Anxiety before and S-Anxiety after gambling

<table>
<thead>
<tr>
<th>SOGS</th>
<th>T-Anxiety</th>
<th>S-Anxiety-B</th>
<th>S-Anxiety-A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>0</td>
<td>29.41</td>
<td>6.72</td>
<td>23.81</td>
</tr>
<tr>
<td>1-4</td>
<td>33.56</td>
<td>7.67</td>
<td>25.00</td>
</tr>
<tr>
<td>5+</td>
<td>42.28</td>
<td>7.21</td>
<td>41.37</td>
</tr>
</tbody>
</table>

A series of one-way ANOVAs were conducted and it was found that there was a significant main effect for SOGS group and T-Anxiety, F(2,78)=23.355, p<.001, S-Anxiety before, F(2,78)=48.49, p<.001 and S-Anxiety after gambling F(2,67)=62.471, p<.001. A Tukey HSD post hoc test revealed that SOGS score of 5+ was significantly different than those that scored lower than 0 or 1-4 (alpha = .05). Although the difference between SOGS (0) and SOGS (1-4) was approaching significance in the S-Anxiety after gambling (p<0.078).

The relationship between S-Anxiety, T-Anxiety and years gambling on SOGS score is shown in Table 3. As shown in Table 3 T-Anxiety was not as predictive of SOGS score as S-Anxiety. S-Anxiety did predict SOGS score as did years gambling (F(3,80)=53.56, p<.001) accounting for 82% of the variance (66% adjusted).

Table 3. Standard multiple regression analysis using predictors S-Anxiety before gambling, T-Anxiety and years gambling on the dependent variable SOGS

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-Anxiety</td>
<td>.219</td>
<td>.037</td>
<td>.579</td>
<td>5.988</td>
<td>.000</td>
</tr>
<tr>
<td>T-Anxiety</td>
<td>.057</td>
<td>.044</td>
<td>.123</td>
<td>1.301</td>
<td>.197</td>
</tr>
<tr>
<td>Years gambling</td>
<td>3.488</td>
<td>.879</td>
<td>.279</td>
<td>3.970</td>
<td>.000</td>
</tr>
</tbody>
</table>

It was also expected that S-Anxiety after gambling would predict SOGS score more than T-Anxiety. The standard multiple regression analysis is shown in Table 4. As shown on Table 4 S-Anxiety after gambling together with years gambling were strong predictors of SOGS score (F(3,80)=65.55 , p<.001) accounting for 87% of the variance (75% adjusted). T-Anxiety was not a strong significant predictor of SOGS.
Table 4. Standard multiple regression analysis using predictors S-Anxiety after gambling, T-Anxiety and years gambling on the dependent variable SOGS

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-Anxiety –after</td>
<td>.203</td>
<td>.026</td>
<td>.744</td>
<td>7.786</td>
<td>.000</td>
</tr>
<tr>
<td>T-Anxiety</td>
<td>.077</td>
<td>.041</td>
<td>.016</td>
<td>1.87</td>
<td>.853</td>
</tr>
<tr>
<td>Years gambling</td>
<td>2.628</td>
<td>.951</td>
<td>.199</td>
<td>2.763</td>
<td>.007</td>
</tr>
</tbody>
</table>

A further multiple regression analysis as shown in Table 5 predicts SOGS score from T-Anxiety, years gambling and the shift in state score between before and after gambling. The pattern of results changes. Since State and Trait anxiety are somewhat correlated, using change scores for S-Anxiety within the regression equation allows T-Anxiety to explain some variance otherwise explained by S-Anxiety. As seen in Table 5, T-Anxiety was a predictor of SOGS with years gambling and the change in S-Anxiety before and after gambling ($F(3,66)=28.04, p<.001$). This indicates that T-Anxiety can predict SOGS if the degree of change in S-Anxiety from before to after gambling is known and accounts for 76% of the variance (56% adjusted).

Table 5. Standard multiple regression analysis using predictors T-Anxiety, years gambling and S-Anxiety change before and after gambling on the dependent variable SOGS

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-Anxiety</td>
<td>.191</td>
<td>.042</td>
<td>.397</td>
<td>4.498</td>
<td>.000</td>
</tr>
<tr>
<td>Years gambling</td>
<td>4.884</td>
<td>1.187</td>
<td>.369</td>
<td>4.116</td>
<td>.000</td>
</tr>
<tr>
<td>S-Anxiety change</td>
<td>.112</td>
<td>.040</td>
<td>.255</td>
<td>2.777</td>
<td>.007</td>
</tr>
</tbody>
</table>

Participants were asked to nominate their perception of won/loss after gambling. A chi squared test indicated that the perceptions of degree of win or loss were not independent of SOGS scores $X^2 (3, N = 67 = 25.02, p < .001)$. As shown in Figure 1 problem gamblers were more likely to report large losses or large wins, whereas others more often reported ‘lost slightly more than intended’ or ‘won slightly more than expected’. There was no relationship between S-Anxiety after gambling and financial outcome of the session.

Discussion

This research sought to place the maintenance of gambling on a more causal basis by looking at traits and moods before and after gambling. This research sought evidence of pre-existing problems and it was hypothesized that T-Anxiety would predict SOGS score. It was found that problem gamblers were more anxious than other gamblers on the trait scale.

The role of state anxiety was investigated and it was hypothesized that gambling would be a greater anticipatory response. This research found that problem gamblers were significantly more anxious on S-Anxiety scales than non-gamblers or social gamblers. This suggests greater anticipatory response leading to the act of gambling becoming secondarily reinforcing. In fact S-Anxiety before gambling, together with number of years gambling, were found to be significantly better predictor of SOGS score than T-Anxiety alone.

The third hypothesis was that if negative affect does have a role in gambling then conditioning would have a greater influence on anxiety when the person has finished gambling. It was found that S-Anxiety after gambling increased significantly in all groups regardless of SOGS score. It was also found that problem gamblers were significantly more anxious after gambling than other
gamblers. Again it was found that when taken together, S-Anxiety after gambling and years gambling, were significantly better predictor of SOGS than T-Anxiety alone. However, when looking at a change in state, T-Anxiety was a predictor of SOGS when years gambling are known. This suggests that the level of T-Anxiety directly influences the intensity of the change in state experienced while gambling.

The results suggest that gamblers who were anxious prior to gambling were also more anxious after gambling. T-Anxiety was linked to the intensity of S-Anxiety however it was not a strong predictor of SOGS when accounting for years gambling and S-Anxiety. In comparison to normative data (Spielberger et al., 1970) T-Anxiety and S-Anxiety before gambling were lower than in clinical populations (e.g., depressive or anxiety disorders) but higher than these groups after gambling.

A particularly interesting finding was that SOGS group predicted the financial outcome of the session. Problem gamblers were more likely to either win or lose more than expected, rather than coming out slightly ahead or behind. However, there was no relationship between the financial outcome of the session and S-Anxiety after gambling. The current research suggests that negative affect in the form of anxiety occurs regardless of the outcome. In particular players reported high levels of excitement, feeling ‘highly strung’, jittery, tense, anxious, and not feeling calm or at ease. This could contribute to explaining the chasing phenomenon where gamblers gamble again soon after the session not just to win back lost money but also to reduce the unbalanced state evoked from the gambling session. It seems that these states may be a matter of degree rather than particular to problem gamblers. Certainly a larger sample size may find that the differences between low and medium scores on the SOGS become significant.

The perceived financial outcome of the session did not relate to changes in S-Anxiety when gambling. This implies that the outcome has little bearing on changes to S-Anxiety while gambling, rather it is the gambling itself that changes S-Anxiety. Changes in anxiety from before and after gambling suggest that the mechanisms that operate within the session are important to identify how these changes occur. McCartney (1995) suggests that engagement in addictive behaviors acts as a distractor from unpleasant emotional states. It is through focusing attention towards an external object that distressing thoughts can be avoided. It is recommended that future research investigate within session variables such as dissociation, narrowed attention, and cognition that influence this change in state.

This research aimed to examine one variable that could contribute towards explaining the mechanisms involved in the maintenance of gambling. It may seem strange that people should be anxious prior to gambling; however this can be explained using a cognitive dissonance model. People have learnt to anticipate the experience of winning and losing as an arousing event and before gambling feel the anticipation of gambling as excitement. However, they also experience the financial and emotional consequences of gambling and realise that they shouldn’t be gambling. This may result in feelings of dissonance, wanting to not gambling, but also wanting to gamble. Further, the increased anxiety after gambling may lead to chasing losses or wanting to gamble again to escape these feelings. Why continue to engage in the cycle? It could be that although the anxiety is uncomfortable, gamblers learnt to tolerate this state. That it is easier to deal with then the reasons that have led them to gamble in the first place.
As shown in previous research the etiology of people developing a problem gambling is diverse. Gambling offers escape from problems for a short time and it seems that it may change mood such as anxiety. While it seems that people actually feel more anxious after gambling, the subjective arousal before and after the gambling session is sufficient to maintain the behavior. People learn that gambling is a quick and effective diversion and through increased play and money waged pair emotional discomfort with gambling and the outcome is not as important as the ritual of gambling. Certainly maintaining a problem gambling may not matter whether you win or lose, but how you play the game.
References


The culture of envy and the problem gambler

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Abstract

Although problem gamblers are not a homogeneous group, many who attend for counselling at GamCare give evidence of a culture of envy that is re-enacted in their gambling behaviour. The presence of such a culture has implications for the counselling process and how that process develops. Drawing on clinical material from the counselling work at GamCare with problem gambling clients, this paper will briefly outline how a culture of envy may be acquired through childhood and then played out and ultimately reinforced in the gambling experience. It will also discuss how defences against envy such as idealisation, devaluation and denial impact the delivery and direction of counselling and the need to develop clinical approaches to address these issues so that the problem gambler may be able to enjoy and not destroy satisfying experiences.

Introduction

Since I have been working with problem gambling clients at GamCare I have been made more and more aware of the complexity of problem gambling behaviour and how that behaviour is played out in the counselling process. Problem gamblers are far from being a homogeneous group and, like forms of gambling, come in many types. It is part of their complexity that often a multitude of processes, conscious and unconscious, are at work in their lives sometimes in alternation, sometimes simultaneously. However, what problem gamblers do have in common is a progressive inability to resist repeated episodes of gambling that can then begin to disrupt, dominate and ultimately damage themselves and those around them.

A major focus of my counselling over the years has been on the preoccupation of problem gamblers with having to constantly seek out opportunities to gamble in order to avoid the threat of emptiness, boredom and dissatisfaction. More recently, however, I have laid particular emphasis on the spoiling and destructive side of client gambling and how one of the most potent factors behind this is a culture of often deep-seated envy that can interfere with and undermine their work, life and activities.
Envy and the problem gambler

Clients attending at GamCare typically present long-standing gambling problems that have often resulted in substantial financial loss, the breakdown or near breakdown of relationships and impaired physical and psychological health. Many also come from a family background where gambling has been the norm. As they begin to talk about what gambling does for them and what it means to them, the overriding impression is an impairment or an inability to experience sources of pleasure outside of the instant gratification and comfort that they get from their chosen mode of gambling. Even the capacity to be satisfied with the fruits of their gambling and share those fruits with others, without being prompted by feelings of guilt or without an exaggerated need for appreciation, is impaired. It is as if, somewhere within them, there is something that interferes with the capacity for complete enjoyment and the feelings of gratitude to which enjoyment gives rise.

Yet in many clients there is often an insatiable need that can never be satisfied and is sought through gambling regardless of personal cost to themselves and others. This may be expressed in a craving for personal power or prestige or the coveting of the prestige, wealth and power that others have attained. It may be expressed in excessive risk-taking or a constant “living on the edge”, what Rosenthal has described as omnipotent provocation. In others it may be seen in the relentless pursuit of that big win or spectacular success.

Illustration: Michael

Michael often talks during counselling of his spread betting where he “bets big to win big”. He is a high achiever who, after having left school with little qualification, has worked his way up to a top position within a stockbroking company in the financial district of London. The risks he takes in his gambling reflect the turbulence of his life, especially his personal and emotional relationships. His need to push to the limit everything and everyone is almost insatiable and he readily admits it is what makes him feel alive. Outside of his gambling and the risking of his and other peoples’ money (he calls money “the buzz word”) he finds only limited enjoyment. Despite having women and a son who love him he is unable to accept or assimilate their love. Without his gambling, for Michael “life is death”.

Many clients have not been able to fulfil or realise the aims and ambitions they set for their lives because of their problem gambling. They describe having a deep sense of frustration and a depressed or angry resentment that gambling has destroyed the very things they need and want most. Life for them has lost its value and they are left looking on, as it were, from the outside.

Illustration: Peter

Peter grew up in a family where money and appearance meant everything. For his mother everything had to be pristine before anyone was allowed to leave the house in case someone came to visit unexpectedly. Some 20 years on, Peter has a girlfriend he wants to marry, a daughter he phones every morning, but is still having to hold down more than one job at a time to sustain a lifestyle that his gambling has largely put beyond reach. In the past he has resorted to criminal activity, spent a short time in prison and made an attempt at suicide. Peter talks longingly of being able to live what he calls “normally” without having to constantly present a false self to the world. On one occasion with his counsellor he spoke of feeling as though he lives behind glass walls looking on at normal people going about their business. However, when challenged about this, he admitted to thinking that normal people are rather boring.

My observations of such descriptions are that the particularly strong levels of destructiveness and inability to lead a satisfying and fulfilling life seen in some clients suggest that envy is being played out and ultimately reinforced in their gambling behaviour.
Feelings of envy are familiar to most people and, no doubt, at some time in their lives most adults will feel envious of others. However, in this paper I am defining envy as the angry feeling that another person possesses and enjoys something that is good and desirable and the envious impulse is to spoil or destroy that which is good. In this sense, envy involves a fusion of elements. There is a feeling of being separate from the good object that is desired and perceived to be the possession of another. There is an anger, even hatred, for the good object’s capacity to entice and excite and there is an impulse or urge to spoil or destroy it because it arouses such intolerable feelings. Envy is listed as one of the seven deadly sins and in the power of its destructiveness it may be felt to be the greatest sin of all.

Part and parcel of the complexity and persistence of envy is that it frequently has its origins in early emotional life. Children grow up surrounded by people with much more than they have. Where a child has been able to build up securely a good internal object and lay the foundations of emotional stability they can withstand the inevitable states of frustration and grievance that are a normal part of childhood. Where this has not happened, where early relations have been seriously disturbed (and many clients at GamCare report childhood histories where they have been exposed to sometimes unmanageable levels of emotional disturbance and deprivation) the child can feel that the good they long for is being deliberately withheld from them and enjoyed by another. The strong feelings of envy that this arouses gives rise to the impulse to deprive, spoil and destroy what the other has and in so doing destroy the desired good as well. It is this deep-seated primary envy that is shown in such clients’ problem gambling.

Illustration: John

John never had emotional closeness as a child. He grew up with a long history of rejection that culminated in his mother ejecting him from the home immediately after his father died. John both hates and envies the ease that he feels other people have been able to attain wealth, power and status that have been denied to him. Their life seems so unattainable. John continues to gamble with the hope that he will be able to win money and the success, recognition and independence he feels money would bring. In one session he described very vividly his fantasy of being able to win enough to travel the world, be invited to speak at conferences and galas, have the admiration of women and even be able to set up a charity for those less fortunate. He would be accepted and feted and thus, although as yet unable to admit it, reverse his situation by stirring up envy in others.

Implications for the counselling process

If problem gambling clients are going to move forward and begin to increase their capacity for enjoyment, gratification and fulfillment the counsellor will need to help them recognise how their envious destructive impulses are played out and then reinforced in and through their gambling and be able to confront it. However, the counsellor may not always find it easy to discern envy for there is often a subtle mixture of the actual expression of envy and defences against it.

One place where the counsellor is very likely to encounter the presence and power of envy and its defences is in the transference situation between themselves and the gambler. Initially, in the urgent need to be protected from the consequences of their gambling, the client may idealise the counsellor as the one who omnipotently is going to free them from their destructiveness. This idealisation of the counsellor may on an unconscious level be an attempt to avoid envious and angry feelings that then remain unexpressed. It may also be allied with the client devaluing their own strengths and abilities to help themselves. Where this does happen, the counsellor will need to question whether this too is a defence for where there is a danger of rivalry with an important figure, by devaluing themselves the client can again deny envy and, at the same time, punish
themselves for it. Such mechanisms are, however, precarious and unstable. As well as defending against envy they serve to stir up further envy of the counsellor which is often intolerable for the client to bear. Sooner or later, it is likely that the counsellor will find themselves being devalued and no longer idealised, for the counsellor who has been devalued need not be envied anymore. Interventions that once were accepted as positive and hopeful become the object of criticism and the client may begin to lose interest in counselling. How quickly idealisation breaks down and to what extent depends on the strength of envy. Some clients, after having been critical, will be able to acknowledge that counselling has actually been helpful and will continue in the process. Others will devalue at every level until, at last, nothing good is left and once again what began with such high expectations and promise ends for them destructively and they withdraw from contact with the counsellor.

Illustration: Paul

From the beginning of counselling Paul was highly ambivalent about giving up gambling. Many early sessions were spent looking at this ambivalence and these times were often difficult and frustrating to negotiate. It was, however, possible to create a positive therapeutic relationship and Paul was able to modify his risk taking. He even started to talk excitedly about re-establishing his business interests in the Caribbean that had been destroyed in a volcanic eruption. He also made comparisons with business people who were more successful and fortunate than himself and very strong feelings of frustration and envy came to the fore. Then, over the next few weeks, his mood changed abruptly. His whole demeanor became flat. He would speak as though he was detached from his feelings, would not make eye contact and started to make excuses for not attending sessions. In his own words he “went missing”. Although the counsellor sensed that he was angry with them for stirring up painful feelings, Paul split off those parts of himself that he felt dangerous and hostile and turned them inwards. But they did not just disappear or go out of existence. No longer being able to positively relate with the counsellor, he stopped counselling and returned to the casino tables with a vengeance.

Working with the problem gambler who is driven by destructive envy places great demands on the skill of the counsellor. Feelings of envy are never easy to admit to. They can be extremely painful and difficult for the client to accept. Experience has taught me that the often bewildering complexity of processes that are at work can only be realistically understood by gaining insight into both the mind and the emotional life of the gambler. This may mean making a way from the adult to the child and through intermediate stages back to the adult. However, defences remain in operation even when insight is gained and in the course of counselling the counsellor will find that they are dealing with sometimes wild fluctuations between movements forward and setbacks. In addition, the counsellor will have to be prepared to work with both negative and positive therapeutic reactions. Clients may cling for long periods to a strong positive transference but this can be deceptive for if it is based on idealisation it covers up the anger and envy.

Conclusion

Having said this, my experience has also shown me that real and positive progress can be made. Many clients have a strong determination to discover the truth about themselves and be helped and this often outweighs the pain and anxiety. The insight gained through the therapeutic alliance makes it possible for envy and the fear of envy to diminish leading to a greater trust in their power to love. A process of integration is set in motion where the envious, hating and hated part of the personality comes closer together with other more loving parts of the self. Excessive risk-taking, omnipotent provocation or cravings for prestige or control that once threatened to overwhelm and destroy are gradually diminished and replaced with greater tolerance of their own vulnerability. Those who have devalued themselves regain some initiative and become able to make decisions and use their abilities more freely. All these changes lead the problem gambler to
an increased and widened capacity to experience enjoyment and feelings of gratitude, to a gaining of control over their destructiveness and to a regaining of important parts of the self lost in the struggle against envy.

Illustration: Michael

Michael, described earlier in this paper, has been able to recognise the effects of the destructive side of his personality, primarily in relation to his spread betting. He has begun to value the more loving parts of himself and is spending quality time with his son. He has also embarked on a regime of healthy eating and exercise. There is still much for Michael to do. So far he has found it difficult to face his hostility to, and yet desire for, the love that is being offered to him in his relationships. In the end however, if positive progress can be sustained, it may well result for him, as for other problem gambling clients, in an expansion of his capacity to enjoy life and ultimately to a discovery of the riches within himself rather than in the external world of gambling.
Gambling problems in a prison population: prevalence, recidivism and screening

Sean Sullivan

Abstract
A survey and screening of one hundred inmates in a medium security New Zealand prison using the SOGS and a new brief screen (Eight Screen) was conducted by trained prison officers. 24 inmates were screen positives with an 83% correlation between screens. Gambling problems were acknowledged by two-thirds of problem gamblers and 3% of the non-problem gamblers. Almost half would like help with their gambling and recognised connections between their offending and gambling. Problem gamblers were more likely to have alcohol problems, committed violent offences as likely as non-problem gamblers, and be Maori. The Eight Screen identified pathological gamblers at least as well as the SOGS (91% vs. SOGS 82%). 15% of inmates were estimated to be pathological gamblers and 6% sub-clinical problem gamblers. Average offending for the problem gamblers was 12.4 years and 10.2 years for the non-problem gamblers.

Introduction
Gambling problems that result in criminal offending are common amongst problem gamblers (Blaszczynski & McConaghy 1994; Lesieur & Klein 1985 (30% pathological gamblers); Jones 1990 (22% probable pathological gamblers)) and forms one of the diagnostic criteria for pathological gambling (APA 2000). In New Zealand, problem gambling amongst community sentenced offenders has been identified as high as one in four (Brown et al 1999) while studies conducted in New Zealand prisons after the current study have identified that 23% of male inmates and 34% of female inmates had current gambling problems (Abbott et al 2000; Abbott & McKenna 2000). In addition the recent New Zealand studies identified a high correlation with alcohol abuse (76% of male problem gambling inmates were hazardous alcohol users (Abbott et al 2000) and similarly over half of female problem gambling inmates, but this was also found in other female inmates (Abbott & McKenna 2000)) while male problem gamblers who abused alcohol were more likely to be serving violent offences and be Maori.

At the time of the current research little was known around problem gambling in prisons in New Zealand, while screening of inmates for gambling problems was not part of the assessment process. It was proposed in the current study to prospectively assess the prevalence of problem gambling amongst prison inmates, albeit with a small sample, ascertain willingness to participate...
in treatment, test a screening process using prison officers and assess the validity of the brief Eight Screen (an eight question screen developed for GPs; Sullivan 1999).

Method

During 1999 and early 2000 100 male prisoners in a central North Island medium security prison were screened using the SOGS and Eight Screen as part of the normal prison assessment process. Prisoners were also asked for information around their use of drugs, gambling, previous or desired treatment help, and questions around their offending. Screening was carried out by induction prison staff that were then trained around problem gambling in a one-day session. One outcome of interest was whether those inmates with gambling problems would admit to them if there were suspicions that enforced treatment may be an outcome. A score of 5 on the SOGS identifies a ‘probable pathological gambler’ while a score of 4 or more on the Eight Screen identifies either a sub-clinical or pathological gambler. The Eight Screen was identified as an early screening test, hence the acronym Early Intervention Gambling Health Test or Eight Screen. Those scoring three or more on either screen were approached for assessment using DSM-IV criteria for pathological gambling by either of two trained problem gambling counsellors with several years experience.

Results

24 inmates scored as probable pathological gamblers on the SOGS with a mean of 9.33 (sd 3.98; range 19-5) compared with 0.55 for non-pathological gamblers \((p<-0.05)\). There was no significant difference in age, marital status, pre-prison employment/non-employment and income for the two groups. 54% of problem gamblers were serving sentences for property offences (fraud, theft, burglary and robbery) compared with 24% of the non-pathological gamblers \((p<-0.05)\). In addition 25% of pathological gamblers had committed aggravated robberies compared with 17% of non-pathological gamblers.

Problem gambling awareness

67% \((n=16)\) of the 24 probable pathological gamblers (‘problem gamblers’) acknowledged that they had either a current gambling problem or one in the past compared with 3% \((n=2)\) of the non-problem gamblers. 54% of the problem gamblers felt they needed to ‘do something’ about their gambling (as did 3% of the non-problem gamblers, while 46% said they would like help with their gambling.

Gambling and offending

42% \((n=10)\) of problem gamblers said there was a connection between their gambling and offending with 80% of these referring to their most recent offences. A further 4% \((n=3)\) of non-problem gamblers also said there was a connection with their offending. The average years of offending for problem gamblers was 12.4 years while non-problem gamblers were 10.2 years.

Gambling and drugs

Problem gamblers were more likely to smoke than non-problem gamblers \((83\% \text{ vs. } 47\% \ p<-0.05)\). Most pathological gamblers drank alcohol while gambling \((67\%)\) while significant numbers used drugs when gambling \((50\%)\). 42% of problem gamblers acknowledged an alcohol problem while 46% acknowledged a drug problem. 63% of problem gamblers acknowledged a smoking problem.

79% of problem gamblers had either felt they had an alcohol problem, tried unsuccessfully to stop using alcohol, voluntarily received treatment for alcohol or had treatment imposed upon them by a Court. This compared with 53% of non-problem gamblers \((p<-0.05)\).
Violence and gambling

25% (n=6) of problem gamblers had been convicted of aggravated robbery with two-thirds categorically stating that their gambling had contributed to their offending.

Ethnicity

76% of problem gamblers were Maori compared with 40% on non-problem gamblers (p<.05). 7% of problem gamblers were Pacific Peoples compared with 3.5% of non-problem gamblers and 21% were NZ European (cf 51% of non-problem gamblers).

Screen psychometrics

Each of the two screens (SOGS and Eight) identified a total of 29 inmates as probable pathological gamblers (SOGS n=24) or problem gamblers (Eight n=24) with a high correlation (r=83%). The Eight Screen identified 91% of assessed inmates who met DSM-IV criteria for pathological gambling while SOGS identified 82% of these meeting the disorder criteria. A sub-clinical level was arbitrarily set at either three or four DSM-IV criteria and the SOGS (five or more) identified 78% of inmates meeting this lower level of problem gambling. However, as the SOGS identifies probable pathological gamblers these sub-clinical gamblers are in effect false positives of the SOGS. A lesser score of 3 or 4 on the SOGS has been often used to identify ‘problem gamblers’, although the psychometrics of this level problem gambler is unknown, and using this lower score 89% of either sub-clinical or pathological gamblers were identified. This came with a specificity cost (specificity=31%). In comparison the Eight Screen at its single 4 cut-off identified slightly less sub-clinical problem gamblers or above (78% vs. SOGS 82% at ≥3) but with a much higher specificity (59% vs. SOGS≥3 of 31%).

Of the 34 candidates for assessment, 8 were transferred or released prior to assessment and one declined assessment. It was calculated that 15% of inmates would meet the criteria of gambling pathology and a further 6% would be sub-clinical problem gamblers.

Discussion

The estimate of prevalence of problem gambling in a New Zealand inmate population at 21% (15% clinical and 6% sub-clinical) was similar to the later research of Abbott et al (2000) (21%; 16% clinical, 5% sub-clinical). Almost 80% of problem gamblers identified an alcohol problem suggesting that problem gamblers appear to be at greater risk for comorbid drug abuse and that drug abuse may be a clinical indicator for screening in this population. Maori appear to be particularly at risk for problem gambling in this population with over three quarters of problem gamblers being Maori. Over half of the problem gamblers said they needed to do something about their gambling while 46% would like help now. Problem gamblers had long experiences with prisons suggesting that reoffending was common and that problem gambling, as identified by 42% of problem gamblers, was a factor.

The Eight Screen appears to be an accurate and brief tool to identify problem gambling. In addition, its use by prison staff appears to be acceptable by inmates in light of the specificity range (although, as with any tool, it can never identify those with gambling problem who chose not to disclose them). Current questions are being included this year in the assessment of New Zealand inmates (the IOM) which has unknown psychometrics. The inclusion of the Eight Screen in the process alongside the IOM questions may be an appropriate was to determine the values of the IOM system in accurately identifying gambling problems. Current information that gambling problems do not contribute to reoffending appears inconsistent with this study and may be an outcome of a process with high false negatives.
Conclusion

High percentages of prison inmates appear to be affected by gambling problems. Effective screening may provide an opportunity to address a problem that appears to be a factor in reoffending. The higher correlation of problem gambling amongst alcohol misusers and Maori raise further clinical and social questions. The Eight Screen appears to be a valid utility tool capable of use by trained prison officers to produce effective screening amongst the prison population.
References


Gambling amongst New Zealand high school students: Is it a hidden curriculum?

Sean Sullivan

Abstract

547 students in varying Auckland socio-economic (SES) areas were surveyed around their gambling, video game playing, and perceptions around risk and skill. Students had participated in all forms of gambling, including those with higher age restrictions, and score highly as problem gamblers on three gambling screens. Higher levels of positive screens were found amongst ethnic minorities. Low SES students scored positive at three times the rate of high SES areas. Gender differences for screen positives were less than expected. Students’ perception of risk for gambling problems was inaccurate, but less so amongst those with highest risk. Video game players were more likely to believe skill played a part in playing gambling machines while frequent/long session video game players were over twice as likely to score positive on the gambling screens. Prevalence of problem gambling was estimated between 7%-16.7% and may be attributable in part to ease of gambling access.

Introduction

International research consistently indicates that young adults are at greater risk for problem gambling (Shaffer & Bethune 2000, Jacobs 2000, Derevensky & Gupta 2000). The range varies between research studies as might be expected, however Gupta & Derevensky (2000) notes that ‘between 4-8% (are) reporting very serious gambling related problems and another 10-15% (are) at risk for the development of serious gambling and gambling related problems’ p115.

Other research indicates that there may be correlations between video game playing and the development of gambling problems (Griffiths & Wood 2000; Gupta & Derevensky 1996. Griffiths & Wood (2000) noted that new generation gambling machines are ‘starting to use videogame graphics and technology …(and) there are plans for developing video gambling games in which people would win money based on their game scores’ p210. Gupta & Derevensky (1996) found that high frequency videogame players were more likely to have gambled and at a rate of once a week or more, that these high frequency players appeared to be drawn to gambling activities, and this group was most at risk for developing problematic gambling habits.

No such research had been conducted in New Zealand while a recent New Zealand epidemiological study identified those aged 18-24years to be the second lowest at-risk group after
those aged 65 years or over, suggesting that young adults in New Zealand did not follow the trend of those overseas in their risk for problem gambling behaviour (Abbott et al 2000).

This study proposed to identify problem gambling risk of young adults in New Zealand, their participation in gambling, their perceptions around risk for gambling problems, videogame playing behaviour and help-seeking. The age group would be lower than the epidemiological study (Abbott et al 2000) by reason of the group selected (high school students), however would suggest whether the overseas findings were consistent for young adults, and if so, that one might conclude that the epidemiological findings for the next age cohort could reasonably be considered to relate as to prevalence i.e. that those in late teens and early 20s remain at higher risk for gambling than the epidemiological study would indicate.

**Method**

Students aged from 13 to 18 years were surveyed in six Auckland High School on gambling they had participated in during the 12 months, their perception around risk of problem gambling, help-seeking preferences and video game playing. They were also asked to complete three brief problem gambling screens. 100 High Schools in the region were blocked into low, medium and high decile ratings to study the effects of socio-economic status, and six (two from each decile block) were randomly selected. Two classes were randomly selected from each of 3rd, 4th, 5th or 6th/7th Forms.

Consent of the Headmaster, Board of Governors and students were obtained. Written details were taken home by the students to enable parents to instruct their children to decline to participate. Students initially received a brief information presentation at least a week prior to participation. Emphasis was on anonymity of responses (placed in envelopes and collected immediately by the researcher), the need for truthful responses and the importance of the information.

Approval was obtained from the regional Human Subjects Ethics Committee.

**Results**

569 students participated in the survey; 22 responses were incomplete (18) or either confused not intended to be a serious response (4). 547 completed responses were received of which 205 were NZ European, 58 Māori, 152 Pacific Nationals, 18 Indian, 49 Chinese, 65 were other ethnic group. Where ethnicity included Māori, students were entered as Māori, where ethnicity included Pacific Nation but not Māori, these were entered as Pacific Nationals, while other multiple ethnicities were entered as ‘other’.

**Gambling participation**

Participation in legal and age restricted forms of gambling during the previous 12 months was compared with adults (DIA, 2000):

- One in three played Lotto (compared with 75% of adults)
- One in three played Instant Kiwi (compared with one in two adults)
- One in four played cards for money (compared with one in 20 for adults)
- One in 14 played 0900 games for money (compared with one in 30 adults)
- One in 10 played gambling machines for money (compared with one in 6 adults)
- One in 25 students gambled on the Internet (compared with one in 100 adults)
- One in 20 students gambled at a casino (compared with one in 6 adults)

Students had participated in Keno at a higher rate than adults
Many of these forms of gambling have no restrictions, such as 0900 numbers, Lotto, Keno, Powerball, Internet gambling, while others have age restrictions (Track 18 years, Instant Kiwi 16 years, casinos 20 years; gambling machines are sited with premises that have a liquor licence (18 years), however many of these premises can be accessed legitimately by those under 18 years, such as supervised bars and clubs. There is no age restriction per se on gambling machines in New Zealand.

**Problem gambling**

Three problem gambling screens were used. 19% of females and 24% of males were positive on the 8-Screen – J, 16% of females and 24% of males were positive on the SOGS-J, while 7% females and 15% of males were positive on the Fisher DSM –J screen. Because of the disproportionate numbers of Pacific Nation students in the survey and their high positives on screens, the overall responses were reduced to the proportions in the community (15-19 cohort was the nearest available). This averaged the screen positives to 16% for 8 Screen-J and SOGS-J and 9% for DSM-J. These are above the 4%-8% found by overseas researchers (Gupta 2000).

European ranged from 5%-10% positives on the 3 screens, Maori 16%-26%, Pacific Nations 21%-39%, Indian 17%-33%, Chinese 10%-31% and others 5%-26%. When the ethnic proportion of the participants was adjusted for the national balance (Pacific Peoples and Chinese were over-surveyed, Pakeha and Maori were under-surveyed) an estimate of the prevalence of positive screening reduced to a range of 7-16.7% of students.

**Perception of risk for gambling problems**

Over half of the High School students taking part in a recent survey thought young people were less likely than older people to have a gambling problem. However young people have about three times the risk of older people (Derevensky 2001). 63% of students thought their risk for gambling problems were less than adults or nil. Those positive for the problem gambling screens were approximately of the same opinion however those in lower decile schools, while were disproportionately more likely to be problem gamblers, were more likely to be aware of the higher risk for young people.

**Videogame playing**

Three-quarters of students played videogames at least once weekly. 6.4% played videogames every day for more than three hours; of these intensive videogame players, 32-47% were positive on at least one of the three screens, compared with 10-21% of the non-intensive players.

Allied to problem gambling risk would be perceptions around ability to use skill to beat a gambling machine. 62% of those who played videogames at least weekly believed they could beat a gambling machine compared with 38% of those who play less often. This compares with 6% of adults who believe that there is a skill element in gambling machines (DIA 2001).

**Ethnicity**

Pacific Peoples appeared to be most likely to be at-risk for gambling problems (positive scores on the three screens ranged from 20-40% of students), followed by Indian (16-34%), Chinese (10-30%), Maori (15-25%) and New Zealand European (5-10%). ‘Other’ ethnic groups ranged from 5-25%.
Socio-economic status

Low socio-economic (SES) status areas were most likely to score as positive on the three screens (range 37-19%), followed by medium SES (16-10%) and high SES (11-5%).

Help-seeking and knowledge

Most students would seek help in the event of a gambling problem from their friend or parents, and not health professionals or school counsellors. Most (82%) however, advised that they would like to know more about problem gambling as part of their life skills training.

Discussion

Young adults appear to be accessing gambling, whether legitimately or not, to a substantial degree, suggesting that restrictions in place are either failing to prevent access or being unenforced. Many forms, such as Internet gambling and 0900 gambling over phones have difficulty in enforcement due to the electronic contact medium. It appears that New Zealand youth have a high level of problem gambling behaviour compared with other countries. This appears to suggest that the low finding of the epidemiological study may be unlikely unless ‘spontaneous recovery’ is extremely high amongst this cohort. Ethnic minorities appear to be at highest risk, as do those in lower socio-economic areas.

The size of the current study was however relatively small and high school students may not be representative of those aged 15-18 years, many of whom have left school. Neither may Auckland students be representative of all New Zealand young people. A further study of equal numbers of students is planned for two other New Zealand areas.

There appear to be few students who are aware of the increased risk for gambling problems for young people, while disproportionate numbers believe they can beat gambling machines, the most potent of gambling problems in New Zealand (PGC 2001).

There appears to be a positive correlation of problem gambling with videogame playing, similar to findings in other countries. The trend to ‘morph’ videogames and gambling machines suggests an area for pre-emptive protection that governments should consider rather than simply react to as the problem arises.

The relatively low differentiation between genders indicates an area of concern and follows the rapid catch-up of presentation rates for problem gambling. Most women (90%+) in specialist services report gambling machines as their gambling problem (PGC 2001).

Conclusion

New Zealand appears to have a serious health effect in the making around youth and problem gambling. Previous indications that youth in New Zealand are at low risk appear to be incorrect. There is a clear need for health promotion, uses strategies that will influence young people to strengthen their resilience to problematic gambling. There is a clear desire to receive that knowledge. New technologies offered by the gambling industry to target young people as gambling consumers may grow what appears to be an already high consumption among this cohort. Gambling problems are described as ‘persistent and recurrent’ (DSM-IV-TR, in APA 2000), suggesting long term affects on well-being of the gambler. That this should commence in early life without the provision of knowledge and skills to build resilience seems reprehensible.
Reference


Problem gambling: What is it and how should it be measured?

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Abstract
This paper examines recent developments in problem gambling prevalence measurement in North America and compares them with practices in Australia. It is found that prevalence is measured conservatively in both continents and this tendency has been taken to extremes in Australia. Arguments of Australian researchers justifying this practice are examined and found to be invalid, as is the argument that prevalence measurement be abandoned in favour of a ‘harm minimisation approach’. It is concluded that gambling prevalence researchers need to take into consideration the purposes to which prevalence estimates are to be used; one of the main uses to which prevalence estimates are put is to estimate the costs associated with problem gambling; and the current practice of estimating gambling prevalence conservatively is likely to lead to an increase in problem gambling and its costs in the future.

Introduction
This paper commences with a riddle: why does Australia have a very high per capita rate of gambling expenditure and at the same time have a very low apparent prevalence41 of problem gambling? Two answers to this conundrum have been proposed: firstly, Australian gamblers have a lower propensity to become problem gamblers than gamblers in other countries; secondly, Australian problem gambling prevalence has been estimated more conservatively than in other countries. It is argued here that the evidence favours the latter explanation. But this answer raises more questions: How is problem gambling prevalence best measured, and what is problem gambling anyway? While the issues involved in these questions are complex and research into them incomplete and inconclusive, the following suggestions are proposed:

1. When estimating problem gambling prevalence, the purposes to which the estimates are to be used is of paramount consideration;

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41 Prevalence is term borrowed from epidemiology that refers to the proportion of a particular population that have a disease at a given time.
2. Problem gambling prevalence rates are typically used to estimate the costs associated with problem gambling and also to compare prevalence rates between geographical areas.

3. Problem gambling prevalence should be estimated in a way that will provide the most accurate estimates of the costs associated with problem gambling;

4. In order to produce the most accurate estimates of the costs associated with problem gambling, problem gambling prevalence should be measured:
   a. On the basis of a continuum of problem gambling rather than on a dichotomy of problem and non-problem gamblers; and
   b. In ways likely to produce equal numbers of ‘false positives’ and ‘false negatives’; and

5. The current practice of estimating problem gambling prevalence conservatively in Australia and the USA should in the future lead to an increase in problem gambling prevalence in those countries.

While the first of these points may seem obvious, rarely do people who measure problem gambling prevalence, or who design methodologies for doing so, make explicit the purpose of doing it (Ferris, Wynne & Single, 1999 is an exception to this rule). This general lack of concern with purpose may be a consequence of the ‘medical model’ of ‘pathological gambling’—if problem gambling is a disease, then there is an automatic and instinctive inclination for epidemiologists to measure its prevalence.

Australians lose more money per capita gambling than do those of any country that keeps reliable statistics (Abbott & Volberg, 2000; Walker & Dickerson, 1996). It is estimated that Australian gamblers lost about $A13.3 billion to gambling in the 1999–2000 financial year, of which about 60 per cent was lost in poker machines, that is, high-intensity electronic gaming machines (EGMs). Each Australian adult gambled $A7,966 on average in 1999–2000 and lost $A931. Gambling revenues from EGMs are currently growing at the rate of 11.8 per cent a year (Darby 2001; Ellicott 2001).

With the exception of Western Australia, EGMs are widely available in Australian hotels and clubs. Australia has by far the largest number of such machines per capita in the world and more than 20 per cent of the world’s total (Productivity Commission 1999, p. 2.11). Moreover, EGMs in Australia are widely dispersed in or near residential areas: in Victoria it is estimated that people travel only 2.5 kilometres on average to play them (KPMG, 2000). There is a strong positive association between the availability of legal gambling facilities and problem gambling prevalence (Campbell & Lester, 1999; Dickerson, McMillen, Hallebone, Volberg & Woolley, 1997; National Opinion Research Centre, University of Chicago, 1999; Stitt et al., 2000).

For these reasons one would expect Australia to have a relatively high problem gambling prevalence. Most published figures, however, indicate that Australian prevalence is actually less than in the USA or Canada. One recent Victorian study stated that only 0.8 per cent of the adult population was ‘at risk’ of gambling problems (KPMG, 2000). In contrast, as discussed below, two recent US and Canadian studies that employed conservative techniques estimated that 3–4 per cent of adults were either problem gamblers or were at risk of developing a problem.

This apparent paradox is a consequence of differences in the way problem gambling is defined and measured in Australia. For example, the persons defined as ‘at risk’ in Victoria would be considered ‘probable pathological gamblers’ or ‘problem gamblers’ in North America. In Australia and elsewhere, problem gambling has usually been estimated by screening instruments that are more or less based on the American Psychiatric Association’s Diagnostic and Statistical
Manual (DSM) criteria for pathological gambling. Australian studies have usually employed modified versions of these and/or different scoring criteria. These definitional and measurement differences have been justified in terms of cultural differences. Higher participation levels and a greater community acceptance of gambling, it has been argued, mean that more relaxed standards should be applied to the measurement of problem gambling in Australia (Dickerson et al., 1997).

Moreover, the DSM criteria, and the ‘medical model’ upon which they are based, have come under criticism by some influential Australian gambling researchers who have argued the medical model be discarded in favour of a ‘harm minimisation’ model of problem gambling (Dickerson et al., 1997). As a consequence, new non-DSM based instruments such as the Victorian Gambling Screen (VGS) are in the process of development in Australia. Although DSM-based instruments remain the tool of choice for North American researchers, there has also been a move away from a rigid adherence to the medical model in that continent. There has been an increasing tendency to see problem gambling along a continuum rather than discrete populations of persons that have problems and those who do not. If the notion of a continuum is accepted, there can be no ‘true’ prevalence rate, as any prevalence estimate will depend on the decision as to where to draw the line or lines along that continuum. Canadian researchers have recently developed an instrument that incorporates a broader range of factors than are included in the DSM (Ferris et al., 1999).

There has, however, been little discussion as to the purposes of estimating prevalence, or the logical consequences of estimating it in particular ways. Should we, for example, be more concerned with avoiding ‘false positives’ (persons who are wrongly classified as problem gamblers) or ‘false negatives’ (persons who are wrongly classified as not having problems)? This paper finds that the general recent tendency in North America, which is even more marked in Australia, is to estimate prevalence conservatively. It will also be argued that this bias carries the risk of increasing the very phenomenon being measured—problem gambling. It is argued that one of the main uses to which prevalence estimates are employed is to provide policymakers with data to assist them to assess the costs and benefits of making changes to the supply of legal gambling and gaming availability. Conservative estimates of prevalence, it is argued, will tend to tip the balance in favour of the benefit side of the gambling equation, leading to an expansion in legal gambling availability and a consequent increase in problem gambling and its costs.

The nature of problem gambling

Problem gambling has been the subject of intense media discussion in recent years following the growth in the availability of legal gambling, particularly the spread of EGMs to suburban clubs and hotels in many jurisdictions. It is generally accepted that gambling can cause problems of various kinds and degrees. There is a broad consensus that problem gambling encompasses gambling behaviours that create negative consequences for the gambler and/or the gamblers’ family, friends and community (Dickerson et al. 1997; Ferris & Wynne, 2001). While the impact of problem gambling will be unique in each individual case some common negative consequences for the gambler include financial problems such as indebtedness and bankruptcy, medical and psychiatric problems, occupational difficulties, damaged personal relationships and legal problems. In some cases, such problems can lead to suicide. Families of problem gamblers often suffer a range of medical, psychiatric and other problems (Haswell, 1999). Problem gambling therefore has a devastating impact on some individuals and their families and associates, and these impacts collectively have significant adverse consequences for communities and for society as a whole.
The ‘medical model’ versus the ‘harm minimisation approach’

A range of biological, psychological and social factors has been implicated in problem gambling, and the relative importance of each is controversial. While several models of problem gambling have been developed a comprehensive review of these is beyond the scope of this paper (for an overview of these see Ferris et al., 1999). It is, however, desirable to provide some details of the ‘medical model’ that has come to dominate discussions of problem gambling prevalence measurement, and the challenge to that approach presented by an alternative ‘harm minimisation approach’ advocated in an influential Australian study (Dickerson et al., 1997).

**The Medical Model**

In recent decades a ‘medical model’ centred on the American Psychiatric Association’s DSM–III criteria for pathological gambling has both explained problem gambling and underpinned the measurement of its prevalence (Dickerson et al., 1997; van Brunchot, 2000). The most widely used method of measuring the prevalence of problem gambling in the 1990s was through a DSM-based screening instrument known as the South Oaks Gambling Screen (SOGS). Pathological gambling is classified under the most recent DSM criteria (known as DSM–IV) as an Impulse Control Disorder and defined as ‘persistent and recurrent maladaptive gambling behavior…that disrupts personal, family, or vocational pursuits’ that is not better accounted for by a manic episode. It is distinguished from ‘social gambling’ and ‘professional gambling’ by a loss of control. It is seen as a progressive, chronic disorder that may follow years of social gambling (American Psychiatric Association 1994, pp. 615–617). The medical model has majority support among psychiatrists, gambling self-help groups such as Gamblers Anonymous, the gambling industry and individuals with gambling problems (Ferris et al., 1999).

A person may be diagnosed as a pathological gambler if, after an evaluation, a psychiatrist believes that at least five of the following ten DSM–IV criteria for pathological gambling are met. The person:

1. Is preoccupied with gambling (e.g., preoccupied with reliving past gambling experiences, handicapping or planning the next venture, or thinking of ways to get money with which to gamble)
2. Needs to gamble with increasing amounts of money in order to achieve the desired excitement
3. Has repeated unsuccessful efforts to control, cut back, or stop gambling
4. Is restless or irritable when attempting to cut down or stop gambling
5. Gambles as a way of escaping from problems or of relieving a dysphoric mood (e.g., feelings of helplessness, guilt, anxiety, depression)
6. After losing money gambling, often returns another day to get even (‘chasing’ one’s losses)
7. Lies to family members, therapist, or others to conceal the extent of involvement with gambling
8. Has committed illegal acts such as forgery, fraud, theft, or embezzlement to finance gambling
9. Has jeopardized or lost a significant relationship, job, educational or career opportunity because of gambling
10. Relies on others to provide money to relieve a desperate financial situation caused by gambling. (American Psychiatric Association, 1994)

In addition, it is a requirement that the behaviour is not better accounted for by a manic episode. It has been argued that these criteria provide the basis for measures of pathological gambling that are reliable, replicable and sensitive to regional and local variation (Shaffer et al., 1994). The
DSM criteria for pathological gambling are also dynamic and responsive to advances in scientific and clinical knowledge. The criteria are currently in their third incarnation, having been revised twice since their introduction in the DSM-III of 1980, with the revision of the DSM-III in 1987 and its replacement with the DSM-IV in 1994. The criteria have another advantage: independence from gambling special interest groups.

On the other hand, it has been argued that the criteria do not adequately represent the full range of gambling problems (Dickerson et al., 1997). Another problem in applying the medical model of pathological gambling to the study of problem gambling prevalence is that the DSM criteria are derived from people who had sought treatment for some gambling problem and such samples are not representative of all problem gamblers. Women, ethnic minorities and individuals with lower than average socio-economic status are less likely to seek treatment (Ferris & Wynne, 2001).

**DSM-based problem gambling screening instruments**

**SOGS and SOGS-R**

The SOGS was the first widely used problem gambling screening instrument and was based loosely on the American Psychiatric Association’s 1980 DSM–III criteria for pathological gambling. While the focus of the DSM criteria is on the behavioural aspects of gambling problems the SOGS places a greater emphasis on financial aspects (Ferris et al., 1999). The original SOGS contained 20 yes/no items representing 7 dimensions. Persons who score 5 are classified as probable pathological gamblers. In addition, some studies describe persons with scores of 3–4 as problem gamblers (Ladouceur et al., 2000).

In keeping with the medical model, in which pathological gambling is seen as a chronic, lifetime affliction, the original version of the SOGS made no distinction between active and inactive gamblers. People who met the criteria were probable pathological gamblers irrespective of how long it had been since their last bet. In order to limit the prevalence of problem gambling to those most likely to be currently experiencing problems, instruments such as the SOGS-R were devised that question people about their gambling behaviours in the immediate past, generally the past six months in Australian studies. In other countries, this so-called ‘current’ rate is usually measured on a 12-month basis. As would be expected, the six-month instrument produces more false negatives than does the 12-month one. In some studies, both lifetime and current prevalence data were collected; the former rates are typically about double that of current rates (Abbott & Volberg, 1999).

The SOGS has fairly good reliability and validity. The imprecise wording of some items and the possibility of acquiescence bias could produce some false positives but this is counterbalanced by the fact that these types of surveys will yield a proportion of false negatives, for reasons explained below (Ferris et al. 1999; Ladouceur et al., 2000). While the instrument can be adapted to measure the prevalence of non-pathological problem gamblers by adopting the 3–4 criterion, the instrument was not designed for this purpose. It has also been argued that the SOGS is not sensitive to regional and cultural diversity (Dickerson et al., 1997).

Despite its deficiencies, the SOGS was the first instrument that enabled useful comparisons to be made between regions, and these studies produced the noteworthy if not especially surprising finding that there is a positive association between per capita gambling expenditure and the prevalence of probable pathological gambling (Walker & Dickerson, 1996).
DSM-IV-based problem gambling screening instruments and the problem gambling continuum

Instruments have also been developed based on the 1994 DSM-IV criteria. These tend to produce lower prevalence estimates than the SOGS. It has been suggested in one authoritative report that this process was assisted by ‘representatives of the gaming industries’ in an endeavour to ‘discount what they saw as unreasonably high prevalence rate estimates’ produced by the SOGS (National Opinion Research Centre, University of Chicago 1999). As might be expected, the increasing spread of EGMs and the corresponding increase in gambling, particularly among women, led to generally higher levels of probable pathological gambling as measured by the SOGS.

The division of gamblers into discrete categories using labels such as ‘pathological’, ‘problem’, ‘at risk’, ‘social’ or whatever, has also come under challenge. Recent major North American studies have taken the view that gambling problems form a continuum along which it may be useful to identify groups that meet particular criteria (Committee on the Social and Economic Impact of Pathological Gambling et al., 1999; Ferris & Wynne, 2001; National Opinion Research Centre, University of Chicago, 1999).

Only a small proportion of persons who experience problems from their gambling seek psychiatric treatment and are labelled as pathological gamblers. Pathological gambling can thus be seen as the tip of an iceberg known generally as ‘problem gambling’. Shaffer et al., (1999, pp. 20–21) developed a three-level classification that was expanded to four levels in the study of pathological gambling by the Committee on the Social and Economic Impact of Pathological Gambling et al., which added a Level 0 to Shaffer’s continuum differentiate non-gamblers from non-problem gamblers:

- **Level 0**: No gambling at all
- **Level 1**: Social and/or recreational, no harmful effects
- **Level 2**: Synonymous with problem gambling
- **Level 3**: Synonymous with pathological gambling

‘Problem gambling’ has also been seen as the tip of an even larger iceberg of ‘at risk’ gamblers. This approach was used in the 1999 National Opinion Research Centre study in the USA, which divided gamblers into four groups based on the DSM-IV criteria:

1. ‘Pathological gamblers’, i.e. those who had gambled more than US$100 in a day and who met five or more of the DSM-IV criteria for Pathological Gambling;
2. ‘Problem gamblers’, i.e. those who had gambled more than US$100 in a day and who met three or four of the DSM-IV criteria;
3. ‘At risk’ gamblers, i.e. those who had gambled more than US$100 in a day and who met one or two of the DSM-IV criteria for Pathological Gambling;
4. ‘Low risk’ gamblers, i.e. gamblers who did not meet any of the DSM-IV criteria (National Opinion Research Centre 1999, p. 21).

A slightly different continuum was adopted by the designers of the Canadian Problem Gambling Index (CPGI), who dropped the word ‘pathological’ as it was considered to have medical and pejorative connotations (Ferris et al. 1999):
• Non-gambling
• Non-problem gambling
• Low risk gambling
• Moderate risk gambling
• Problem gambling (Ferris & Wynne, 2001).

The CPGI is a multidimensional instrument of 31 items. Behavioural indicators comprise only about half of the items compared with 80-90 per cent for other DSM-based instruments. Other dimensions of the scale include gambling involvement, cognitive and emotional factors and adverse consequences. In addition, the instrument incorporates some unscored environmental factors and correlates of problem gambling that can be used to develop profiles of different types of gamblers. The instrument was designed so that scores can be compared with those of the SOGS and DSM-IV instruments. It should be noted that the CPGI produces results that correlate highly with both the SOGS and DSM-IV measures and has yet to be shown to be superior to them (Ferris et al., 1999; Ferris & Wynne, 2001).

A model of problem gambling that sees it as a continuum whose prevalence can be measured reliably by DSM-based screening instruments has come to be generally accepted. This is in contradistinction to a rigid interpretation of the medical model, which proposes that there is a distinct population of pathological gamblers. The continuum model has the potential to enable more accurate measures of the costs of gambling as different costs can be assigned in accordance with the severity of the problem.

In addition, there has been a general adoption of current rates of measurement, contrary to the lifetime affliction proposed by the medical model. Moreover, particularly in the case of the CPGI, there has been a movement away from a strict medical model approach towards a more holistic and multidimensional approach. Thus, from the perspective of problem gambling prevalence measurement, the medical model of pathological gambling has all but crumbled away, leaving as its major legacy the DSM criteria. The key question remaining is whether the DSM criteria provide an adequate basis for measuring problem gambling and, if not, what should replace them.

Some methodological issues

There are methodological problems in measuring the prevalence of problem gambling with survey instruments. All surveys are subject to sampling and non-response biases. Low income persons and persons who do not speak the national language are less likely to own telephones or more likely to refuse to participate if they do. Problem gamblers are less likely to be at home than other people because they are more likely to be at a gambling venue or in gaol, and they are less likely than others to answer the phone when they are at home in order to avoid debt collectors (Ferris et al., 1999). While it is possible to compensate for these biases using weighting strategies, few studies do so.

A more difficult problem is that of false positives and negatives. As noted above, screening instruments will wrongly classify a proportion of respondents as problem gamblers. There is perhaps an even more marked tendency for them to produce false negatives. Problem gamblers have a marked tendency to lie about their involvement in and expenditure on gambling: this tendency indeed comprises one of the DSM criteria for pathological gambling. Moreover, there is almost certainly a greater propensity for people to be untruthful when completing a gambling screening instrument than in a face-to-face encounter with a psychiatrist to whom they have been referred for a gambling problem. About 10 per cent of people in Australia and the USA respond affirmatively when asked whether gambling has caused problems for themselves or their families (Gallup, 2001; KPMG, 2000). In one Australian study more than a third of EGM players
responded affirmatively to five or more SOGS questions in face-to-face interviews at EGM venues (Ohtsuka et al., 1997), while typically only one to two per cent will do so in anonymous telephone interviews of the general population. People are thus more willing to respond affirmatively in situations where the questions are very general, do not necessarily implicate the individual (‘you or your family’) or when people are caught in the act of gambling. Cultural differences may also affect reliability, as groups differ as to the extent they are willing to disclose personal information.

The tendency to conceal gambling problems is probably amplified by the kind of items used in screening instruments, which are transparent and often confronting and embarrassing. Moreover, some persons with gambling problems may lack sufficient insight to answer the questions accurately. Psychometricians typically overcome such problems by assembling samples of persons known to have a particular attribute and asking them to rate their agreement with batteries of attitudinal questions. The results of these experiments are analysed through statistical techniques such as factor analysis to find groups of non-threatening items that will reliably identify people with the attribute. Some psychological measurement instruments also incorporate ‘lie’ or ‘faking’ scales aimed at detecting the extent to which respondents are deliberately attempting to bias their responses to project a more favourable or unfavourable persona. Incorporation of such scales in problem gambling screening instruments might be a useful means of weighting responses according to the probability that the responses are reliable. Another way of improving the reliability of the scales is to abandon where possible the use of dichotomous yes/no responses in favour of more finely calibrated measurement scales. Cultural differences may be adjusted for by a variety of strategies such as the establishment of norms and weighting (Aiken, 1997).

Some international comparisons of prevalence

A meta-analysis of mainly SOGS-based studies conducted in the USA and Canada between 1975 and 1997 estimated the rates of current (past 12-month) pathological gambling (Level 3) at 0.9 per cent and problem gambling (Level 2) at 2.0 per cent of the adult population (Shaffer et al., 1999). This study indicated that prevalence rates were rising, with past year Level 3 rates of 1.3 per cent in studies conducted between 1994 and 1997. The rise was attributed to both an increase in gambling availability and social acceptance of gambling (Shaffer et al., 1999).

A 1998 US survey conducted by the National Opinion Research Centre (1999) employed a DSM-IV based problem gambling screening instrument, the NORC DSM Screen for Gambling Problems (NODS), which was designed to be more demanding and restrictive in assessing problematic behaviours than the SOGS or other DSM–IV based screens. The study also employed an unusual sample selection technique. The sample, restricted to persons who acknowledged losing more than US$100 in a day or a year, comprised a mixture of randomly selected persons and gambling establishment patrons. The study concluded that in 1998 current (past 12-month) pathological gamblers comprised 0.6 per cent of the U.S adult population, 0.7 per cent were problem gamblers and 2.9 per cent at risk (National Opinion Research Centre 1999, p. ix).

The NORC estimate of problem gambling prevalence was less than half that measured by the earlier mainly SOGS-based studies, even though actual prevalence had almost certainly increased by 1998. Moreover, the problem gamblers in the NORC study had generally similar levels of problems as pathological gamblers: compared to low risk gamblers, they had much higher levels of job loss, unemployment, welfare dependence, bankruptcy, divorce, mental health utilisation, arrest and incarceration rates (National Opinion Research Centre, 1999, p. 58). In contrast, SOGS-based studies have shown significant differences between pathological and sub-pathological problem gamblers in terms of illegal behaviour and other attributes (Dubé et al.,
It is thus possible that a proportion of the problem gamblers identified by the NORC were actually pathological gamblers, and the NORC estimates should therefore be regarded as conservative, lower-range estimates.

The initial CPGI general population survey of Canadians indicated that 0.9 per cent of adults were problem gamblers and 2.4 per cent were at moderate risk. The proportion at low risk was not reported. The figure for problem gamblers fell between those obtained using a DSM-IV measure (0.7 per cent) and the SOGS (1.3 per cent) while the proportion at risk was higher than that measured by a criterion of 3-4 on the SOGS (1.3 per cent).

**Australian comparisons**

Conservative estimates thus indicate that 4.2 per cent of US and 3.3 per cent of Canadian adults had a current gambling problem, or were at risk of having one. At the time of the study only 20 of the 50 US states had EGMs and, in most states, these were concentrated in a small number of casinos. One would, all else being equal, expect that a higher proportion of Australians (except those in Western Australia) would have gambling problems and be at risk of developing them.

Instead, according to various Victorian Casino and Gaming Authority media releases and reports only 0.8, 1.5 or 2 per cent of adults in Victoria were ‘at risk’ of becoming problem gamblers according to SOGS-based measures (KPMG, 2000, p. 73). This anomaly results from differences in the way Australian and American researchers use the screening instruments. The technical deficiencies of Australian prevalence studies have been analysed in some detail by Abbott, (2000) and Abbott and Volberg (1999). This section of the paper will provide only a brief non-technical summary of these issues, and readers who require more detail are advised to refer to the works of Abbott and Volberg.

In order to compensate for the supposed tendency of the SOGS to overestimate problem gambling prevalence, many Australian studies have employed a six-month rather than 12-month time frame when measuring current rates. This strategy provides a weaker screen for identifying people with serious gambling problems. But even the six-month measure produced worrying numbers of problem gamblers. Instead of concluding that Australia had a high prevalence of problem gambling, some Australian researchers argued that Australians should be measured differently to other human beings. The 5+ criterion was thus increased, sometimes to as much as 10+ (Productivity Commission, 1999, p. 6.24). Abbott and Volberg (1999, p. 100) state that if such a methodology had been employed in a 1991 New Zealand study, it would have found that there were no pathological gamblers in New Zealand at all instead of the estimate obtained of 1.17 per cent of adults. In addition, Australian researchers have added to or changed the SOGS questions, or interspersed them with other questions (Productivity Commission 1999, pp. v.1 to v.4).

The 10+ SOGS criterion for Australia has been justified on four grounds:

1. A national study in 1991/92 found current prevalence rates of 6.6 per cent when a 5+ cutoff was used;
2. Expenditure patterns of persons scoring 5+ were considered unlike those of gamblers seeking help from expert clinicians;
3. Expenditure patterns and other gambling related problems of persons who scored 10+ were more in line with expectations as to what constituted a problem gambler; and
4. On the basis of a distribution of SOGS scores of persons who attended a specialist clinic and who were supposed to be known to satisfy the DSM-IV pathological gambling criteria (Dickerson et al., 1997, p. 38).
These are insufficient grounds for changing a fundamental property of a standard measurement instrument. A scoring criterion should not be changed merely because one study produces an unexpected result. It is not valid to suppose that most problem gamblers will have the same characteristics as those seeking treatment, for reasons outlined above. Self-reported expenditure figures on gambling are notoriously unreliable. The sample in the study referred to in the fourth point comprised just 14 women and 68 men (Dickerson, 1996).

Australian gambling researchers have also employed the expression ‘at risk’ in novel ways. As noted above, even conservative estimates indicate that 4.2 per cent of adult Americans were problem gamblers or at risk, while as few as 0.8 per cent of adults in Victoria are said to be at risk. Why are Australians seemingly less at risk than Americans despite the increased availability of EGMs in the former country? The answer is that, in the view of the Australian researchers, Australians are only ‘at risk’ if their 6-month current SOGS-R score is five or above, that is, the level considered in other countries to be applicable to probable pathological gamblers when a 12-month measure is used (Dickerson et al., 1997). Abbott & Volberg (1999, p. 101) argue this labelling is ‘incorrect and misleading’.

Even more disturbing is the practice of some Australian researchers to apply this incorrect and misleading terminology to other research. KPMG (2000, p. 93 n. 14), for example, claim that ‘…the Productivity Commission’s National Gambling Survey conducted in 1999…found that 98.0 per cent of the Victorian population are not at risk, and 97.7 per cent of the Australian population are not at risk’. This is not in fact what the Productivity Commission found: ‘In sum, around 293 000 people or 2.1 per cent of adults, are estimated to be experiencing significant problems with their gambling. And still others are at risk’ (Productivity Commission, 1999, p. 6.1). The Productivity Commission did not attempt to quantify the numbers ‘at risk’, but did note the differences in definition between Australian and American researchers.

The differences in approach between Australian and other problem gambling prevalence researchers have been justified in terms of cultural differences. According to Dickerson et al., the ‘only definition of problem gambling that has been detailed in the literature, “pathological gambling”…was couched in language that was not compatible with the Australian attitudes and social perspectives on gambling’ (1997, p. 1). According to a popular notion, Australians are so fond of gambling that, if there were nothing else to bet on, they would bet on a hypothetical race between two flies crawling up a wall (Charlton, 1987). The processes by which this supposed propensity to gamble immunises Australians against gambling problems has never been explained. Moreover, there is no reliable evidence that Australians do have a higher propensity to gamble. Gambling is endemic in most cultures. There is a widespread belief that propensity to gamble is ingrained even more deeply in some Asian, Latin American and eastern European cultures than is the case in Australia (Gabb, 2001). Dickerson et al. (1997, pp. 84–97) also comment in some detail on the apparently high prevalence of problem gambling within relatively recently arrived non-Anglo-Celtic immigrant communities in Australia.

A recent detailed review of the comparative history of Australian gambling conducted by the Australian Institute for Gambling Research concluded that the Australian inordinate love for gambling is a myth peddled by popular sociologists and historians. The study argued persuasively that the myth is based chiefly on anecdotal tales written by journalists, ex-gamblers and religious crusaders (Australian Institute for Gambling Research, 1999, p. 7). Whether or not this is the case, it can be said with some confidence that Australians have no historical or cultural attachment to the large casinos or high intensity EGMs that take some 70 per cent of national gambling expenditure, as these have only appeared in comparatively recent times. On the other hand the forms of gambling that dominate Australian mythology—coin tossing, racetrack and SP
betting—have either markedly declined or virtually disappeared (Costello & Millar, 2000). Australian approval of gambling appears to be very much dependent on the type of gambling, with majority disapproval of EGMs in suburban hotels and clubs (Costello & Millar, 2000; KPMG, 2000; Morgan, 1990; Saulwick, 1990, 1994).

**The harm minimisation approach**

Some influential gambling researchers in Australia believe the medical model of problem gambling to be either wrong or inappropriate for Australia. They have argued that the DSM criteria are over-inclusive and inaccurate when used in the Australian context and that the SOGS is defective and inappropriate. Instead, a ‘harm minimisation approach’ has been proposed. The key manifesto of this approach is Dickerson et al. (1997), a literature review of problem gambling measurement commissioned by the Victorian Casino and Gambling Authority. This report commenced with a poorly constructed excoriation of the medical model of problem gambling that relied on authorities such as the American tobacco industry, Thomas Szasz and Hans Eysenck.

The DSM-IV criteria were rejected on the grounds that they had not been subjected to rigorous validity and reliability checks and were ‘likely to fail to discriminate between players who gamble regularly with high levels of interest and pleasure attached to the activity, and those players whose gambling may be causing problems’ (Dickerson et al., 1997, p. 16). It was contended also that the items comprising the DSM-IV pathological gambling criteria were ‘primarily concerned with a person’s preoccupation with gambling’ (p. 103, emphasis in original). An examination of the criteria, provided above, shows this assertion to be incorrect. Of the ten criteria, only one (no. 1) deals with preoccupation. The remainder cover a wide range of behaviours and attributes generally accepted as associated with problematic gambling: tolerance (2), addiction (3, 4), escapism (5), chasing losses (6), untruthfulness (7), illegal behaviour (8), relationship difficulties (9) and financial difficulties (10). Furthermore, if the criteria really were primarily concerned with a person’s preoccupation with gambling, then they would presumably be insufficiently inclusive and result in measures that underestimate prevalence. Instead, Dickerson et al. (1997, p. 103) argue that the criteria are ‘too inclusive’ and their use would lead to overestimation of prevalence.

Instead of proposing more appropriate criteria Dickerson et al. advocate ‘harm minimisation strategies’ (1997, p. 17). Little support was provided for this recommendation apart from a curious analogy with needle exchange programs. Moreover, harm minimisation strategies are not a model of problem gambling behaviour or measurement, and in general they are not incompatible with the medical model or any other model of gambling. In terms of a research strategy for evaluating the prevalence of problem gambling, Dickerson et al. (1997, p. 110) suggest abandoning the research objective of establishing ‘the prevalence or incidence of problem gamblers’ in favour of an approach in which multiple data sets are examined to find answers to questions about very specific contexts (Dickerson et al., 1997, pp. 110-113). In this paradigm, ‘what constitutes problem gambling will vary from context to context, from group to group, from individual to individual’ (Dickerson et al., 1997, p. 111).

Such a Balkanised model of gambling research, it is suggested, would delight the gambling industry. It not only reinforces the industry’s position that gambling is an individual rather than a social problem, but it would prevent regional or temporal comparisons, making it impossible to predict or evaluate the impacts of legislative or other changes to the gambling environment.
Discussion

This paper has examined developments in problem gambling prevalence measurement in three countries. In all countries, aspects of the formerly dominant ‘medical model’ have come under challenge. While the DSM criteria remain the basis of instrument construction in the USA, the notion of problem gamblers as a distinct population suffering from a disease has been largely abandoned in favour of a problem gambling continuum. In Canada, the major development has been the development of an instrument, the CPGI, which is based on criteria that go beyond those of the DSM. The CPGI nevertheless provides measures that can be compared with DSM based instruments. Australian researchers have manipulated the SOGS to produce prevalence estimates that are so conservative as to be ludicrous, while some influential researchers have suggested that prevalence measurement be abandoned in favour of a vague ‘harm minimisation approach’.

It is suggested that the Australian approach is misguided. Prevalence estimates are used widely by government policy makers and their advisers to estimate the costs associated with the introduction or expansion of gambling facilities. For example, prevalence estimates were used by the Productivity Commission (1999) to estimate the national costs and benefits of gambling, and they are used regularly in submissions to state regulators for the purpose of estimating the costs associated with the approval of new EGM licences. Prevalence estimates may also be used for other purposes such as allocating funding for harm minimisation programs according to where they are most needed. The approach advocated by Dickerson et al. (1997) would destroy the capacity to perform such analyses.

The chief outcome of the Australian approach has been intellectual confusion, with substantial adverse implications for public policy. This has been acknowledged frankly by one of the co-authors of Dickerson, et al. (1997):

“Judges and magistrates rely on ‘expert’ evidence to provide guidelines as to the meaning of problem gambling and factors that reliably indicate that a gambler has a problem, and to clarify issues. In the current climate, it is likely that the court could be presented with quite contradictory evidence from two expert witnesses who disagree over the definition and tests for problem gambling. This matter will not be resolved until research is able to provide more reliable and valid criteria for the nature and dimensions of problem gambling, and until the judiciary and magistracy are better informed about the issues” (McMillen & McAllister 2000).

In all countries examined there has been a tendency for prevalence to be estimated conservatively, most markedly in Australia. Except for Australia, the rationale for so doing has never been clearly explained, and the Australian justification for doing so has been found to be lacking in validity. Such estimates lead to the costs of problem gambling being underestimated, skewing cost-benefit estimations in favour of the benefits. This, in turn, will tend to lead to an increase in the availability of gambling facilities, which, in turn, will lead to an increase in problem gambling.

This outcome can only benefit the gambling industry, an industry that has provided Australian prevalence researchers with substantial amounts of financial support. This type of funding has led to the perception of a conflict of interest (Costello & Millar, 2000). According to an associate commissioner to the Productivity Commission Inquiry, Robert Fitzgerald, ‘the perceived lack of independence due to industry funding sources calls into question some of the research undertaken and assumptions used by some researchers generally’ (Costello & Millar 2000, p. 197). The Productivity Commission Inquiry into Australian Gambling Industries recommended that the direct links between the gambling industry and academic researchers be severed and that industry
funding for research instead be distributed by a national body in a fair and transparent way (Productivity Commission 1999, ch. 22).

Despite some recent advances, much more needs to be done to develop a reliable and valid successor to the SOGS. Further debate and research is needed as to whether the DSM still provides the most appropriate criteria for the measurement of problem gambling, and if not, what should replace it. There is need for a standardised problem gambling nomenclature to prevent terms such as ‘at risk’ developing multiple meanings. Instrument developers need to take into consideration the uses to which prevalence rates will be put, and to develop measures that are appropriate for those purposes.
References


Charlton, P. (1987), Two Flies up a Wall; The Australian Passion for Gambling, Sydney: Methuen Haynes.


Do women gamble for the same reasons as men?

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Abstract
A study involving 83 female and 72 male gamblers tested the direct and interactional effects of avoidance coping and five dysphoric moods on problem gambling. Important differences were found between female and male gamblers. For female gamblers loneliness, boredom, anxiety, depression and avoidance coping all independently predicted problem gambling as was expected. Additionally, as expected, interactions between each mood and avoidance coping significantly predicted problem gambling, such that female gamblers with high dysphoria and high avoidance coping tended to show substantially more symptoms of problem gambling than those high in only one variable. In contrast, results for males revealed that only loneliness, boredom and stress significantly predicted problem gambling. Contrary to expectations neither avoidance coping nor the any of the interactional relationships between dysphoric mood and avoidance coping predicted problem gambling. These results supported research by Brown and Coventry (1997) and suggest that some females may be gambling to escape dysphoric moods. There was no indication that this motivation applies to male gamblers.

Introduction
Over the years many theories have been put forward to explain both gambling and problem gambling. Explanations involving the personality of the gambler and cognitive explanations such as representativeness bias and illusion of control have been particularly popular in the past. Other explanations have been more controversial, for instance the proposition that gambling can become an addiction similar to drug or alcohol addiction. Proponents argue that the strong attachment problem gamblers feel to their gambling enables it to be classified as a psychological if not physical addiction. However, detractors argue that an addiction must have a physiological basis to warrant diagnosis (Murray, 1993; Orford, Morison & Somers, 1996). Of the several explanations supporting gambling as a psychological addiction, Jacobs’ general theory of...
addictions (Jacobs, 1989) appears to be the most widely used and contains some interesting propositions.

Briefly, Jacobs’ (1989) theory revolves around a combination of two factors, (a) a background of negative childhood experiences, and (b) a physiological condition of either hyper (over) or hypo (under)-arousal (this condition is expected to differ depending on the addiction). Jacobs argues that a combination of these two factors can explain all psychological addictions. In terms of problem gambling, Jacobs argues that an individual who is suffering from a chronic hypo-aroused state will be constantly searching for stimulating experiences to alleviate feelings of boredom. However, Jacobs does not believe that this by itself is enough to explain problem gambling.

He argues that a problem gambler must have had a very negative childhood experience, which has left them feeling inadequate and low in self-esteem. He theorises therefore that the gambling, as well as providing excitement, works to relieve tension and provide a psychological escape from long-term feelings of inadequacy and psychological distress (Gupta & Derevensky, 1998; Jacobs, 1989). This explanation shows some similarity to that of the tension-reduction model, which argues that gambling is undertaken as means of satisfying otherwise unmet needs, possibly being used as a means of escape from feelings of depression or loneliness (McCorriston, 1999; Walker, 1995). Jacobs’ theory is attractive in that it provides a greater depth of explanation than either the theory of hypo-arousal or tension-reduction does by themselves. However, the evidence supporting the hypo-arousal hypothesis is very mixed with only some of the research showing the expected relationships for gamblers (Blaszczynski, Wilson & McConaghy, 1986; Langewisch & Frisch, 1998; Murray, 1993). Additionally, although there is evidence of depression and other negative mood states in problem gamblers (Becoña, Lorenzo and Fuentes, 1996; Gupta & Derevensky) it has yet to be shown that these are chronic conditions caused by childhood experiences rather than other more proximal factors (Gupta & Derevensky; Walker, 1995).

In total there do appear to be some problems with Jacobs’ theory. However one very interesting aspect contained in both Jacobs’ theory and the tension-reduction model is the suggestion that problem gamblers may be looking for a means of escape rather than searching for a ‘high’. Both theories suggest that problem gamblers may be gambling to distract themselves from dysphoric states such as depression, loneliness or boredom, implying that the gambling may be a type of avoidance or escapist coping. In fact, recent qualitative research investigating female problem gamblers has found that many do claim to be gambling to escape negative feelings such as depression, anxiety, loneliness, isolation and stress (Brown & Coventry, 1997; Johnson & McLure, 1997). As well, past quantitative research has found some evidence that both male and female problem gamblers experience elevated levels of dysphoric moods as well as an over reliance on avoidance or escapist coping (e.g. Becoña et al., 1996; Getty, Watson and Frisch, 2000; Ohtsuka, Bruton, DeLuca and Borg, 1997; Scannell, Quirk, Smith, Maddern and Dickerson, 2000).

However, although there is evidence of elevated dysphoric mood states in both male and female problem gamblers, it is much less certain that male problem gamblers are gambling specifically to escape these negative feelings. In fact, two studies which compared male and female problem gamblers on their self-professed motivations found female problem gamblers were significantly more likely to say they were gambling to escape anxiety or worry than male problem gamblers. In contrast male problem gamblers were more likely than females to say they were gambling to win or to improve self worth (Loughnan, Pierce & Sagris, 1996; Pierce Wentzel & Loughnan, 1997). These results suggest that female problem gamblers may be more likely to use gambling specifically as a distraction from dysphoric moods.
In sum therefore, there would appear to be quantitative evidence to suggest that both male and female problem gamblers may be experiencing high levels of dysphoric mood as well as showing an over reliance on avoidance coping. However, the qualitative research suggests that it is not negative mood which is leading to problem gambling directly, it is the use of gambling as a distraction or escape from the negative mood which appears to result in more problematic gambling (Brown & Coventry, 1997). Additionally, the evidence to suggest that gambling is being undertaken specifically to escape dysphoric mood would appear to be somewhat stronger for female gamblers than male gamblers.

Although some research has been undertaken to explore the simple relationships between dysphoric mood and problem gambling or between avoidance coping and problem gambling, to the author’s knowledge no research has directly tested whether gambling is being undertaken specifically to escape dysphoric mood. This complex relationship requires an assessment of the combined effects of dysphoric mood and avoidance coping on problem gambling rather than just the simple effects of high scores on one of these variables.

The present study therefore assessed an interacational model, where the emotion-moderating effects of characteristic styles of coping were tested for both male and female gamblers. Three steps were undertaken to test this model. Firstly, it was hypothesised that for both male and female gamblers, individuals experiencing high levels of dysphoric mood (assessed via measures of anxiety, depression, stress, loneliness and boredom) would tend to experience more symptoms of problem gambling. Secondly it was hypothesised that for both male and female gamblers, individuals with a high tendency to rely on avoidance coping would tend to experience more symptoms of problem gambling.

Finally, the key hypothesis suggested that for both male and female gamblers there would be a significant interaction between avoidance coping and dysphoric mood such that those with high dysphoria (again measured via depression, anxiety, stress, loneliness and boredom) and high avoidance coping would experience more symptoms of problem gambling than those high in just one variable.

Method

Participants

Participants recruited for this study were all over the age of 18 and were defined as current gamblers (i.e. they had gambled at least once in the past 12 months). Participants were 83 females (M=28.4 years, SD=13.5 years) and 72 males (M=30.1 years, SD=12.9 years), one female did not report age. Of these, 95 participants were university students, 13 were recruited via a gambling counselling organisation in the outer east and 47 were accessed via broader community contact.

Materials

Participants completed a questionnaire that included information about gambling behaviour and demographics as well as measures of coping, problem gambling and several measures of dysphoric mood (loneliness, anxiety, depression, stress and boredom). All of these mood states were included because they had been implicated in prior gambling research but not all had been tested on both male and female gamblers or in conjunction with coping strategies.
Loneliness

The UCLA loneliness scale (Russell, Peplau & Cutrona, 1980) consists of 20 items relating to feelings of loneliness the participant may have had experienced in relation to other people. The items are rated on a four-point Likert-type scale, where 1 = never and 4 = often. The measure has 10 positively scored items (e.g. I feel isolated from others), and 10 negatively scored items (e.g. I do not feel alone), with overall loneliness scores calculated by summing all items. Higher scores therefore indicate higher levels of loneliness. The measure has shown excellent internal consistency (\(\alpha = .94\)) while positive correlations with several other loneliness scales and a lack of relationship with conceptually distinct emotions indicate the measure has construct validity (Russell, 1982).

Depression, anxiety and stress

The Depression, Anxiety, Stress Scale (DASS21) (Lovibond & Lovibond, 1995) is a shorted version of the full DASS consisting of 21 items querying the participant’s feelings over the past week. All items are rated on a four-point Likert-type scale, where 1 = did not apply to me 4 = applied to me very much, or most of the time. The measure has three sub-scales (seven questions in each), with questions relating to depression (e.g. I felt down-hearted and blue), anxiety (e.g. I felt I was close to panic) and stress (e.g. I found it hard to wind down). Scores are summed and then reduced by seven to bring them into alignment with normative samples, which are scored 0-3 rather than 1-4. Finally scores are multiplied by two so that they can be directly compared to normative samples based on the full DASS. Questions are all worded such that higher scores indicate higher levels of depression, anxiety and stress. The measure has shown high internal consistency (depression \(\alpha = .81\); anxiety \(\alpha = .73\); stress \(\alpha = .81\)) and evidence of construct validity with strong positive correlations between the subscales and theoretically similar measures (Lovibond & Lovibond).

Boredom

The Boredom Proneness Scale (Farmer & Sundberg, 1986), is a 28 item true-false scale designed to capture the participant’s tendency to become bored. The measure particularly relates to feelings of emptiness and loneliness associated with boredom, as well as measuring the ability of individuals to access adaptive resources and their level of connectedness to environments or situations. The measure has 18 positively scored items (e.g. Time always seems to be passing slowly) and 10 negatively scored items (e.g. I am good at waiting patiently). Items are summed for a complete score with higher scores indicating higher boredom proneness. The measure has been found to have reasonably good reliability (\(\alpha = .73\) and .79; test-retest reliability at one week \(r = .83\)) and has shown validity via moderate to strong positive relationships with other boredom scales and self-reports of boredom.

Avoidance Coping

Coping resources are theorised to help individuals maintain psychological health by mediating the impact of life stressors (Billings & Moos, 1984). Billings and Moos’ coping scale asks respondents to think of a stressful event which occurred in the last three months and then indicate the frequency of use of 28 different coping strategies to resolve the event. The use of each strategy is rated on a four-point Likert-type scale, where 1 = never used and 4 = often used. The measure has three subscales, two of which contain two individual factors. However, as the focus of the present study was on avoidance/escapist coping, only the avoidance factor (labelled emotional discharge) has been described fully. Scores are obtained by calculating the mean
response of all items contained in the factor. Emotional discharge (avoidance coping) has six items and relates to attempts made by the individual to reduce tension by refocussing on other behaviours such as smoking or eating and to the verbal and behavioural expression of unpleasant emotions (e.g. Tried to reduce tension by drinking more) (reliability $\alpha = .41$). The moderate to low alpha for this factor was argued by Billings and Moos to be due to the likelihood that only one or two strategies would be utilised within the factor, thereby reducing the use of alternative responses and setting an upper limit on the reliability coefficients. For the purposes of the current study this level of internal consistency was considered sufficient.

**Problem gambling**

The South Oaks Gambling Screen (SOGS) is a 23-item instrument (20 scored items) designed to give an indication of the severity of gambling problems in a gambling individual (Lesieur & Blume, 1987). The screen is based on the Diagnostic and Statistical Manual of Mental Disorders’ (DSM-III) (American Psychiatric Association, 1980) problem gambling criteria and is consistent with later versions of the DSM. Questions cover problem gambling indicators such as chasing losses, gambling more than intended, feeling guilty about gambling, reactions of others to the individual’s gambling and borrowing money to gamble. Scores range from 0 to 20 with a score of 5 or more indicating problem gambling and a score of 10 or more indicating severe problem gambling. The SOGS is a widely used measure of problem gambling and has shown high internal consistency and test-retest reliability as well as correlating highly with the DSM-III-R criteria for problem gambling (Lesieur & Blume).

**Procedure**

All questionnaires were completed anonymously in participants’ own time, however several methods of recruitment were undertaken for the current study. Ninety-five first year psychology students were recruited at a Melbourne University with their participation contributing to a subject requirement. Forty-seven general community members were recruited as a convenience sample of friends and family known to the researcher. Finally, 13 problem gamblers were recruited via a Melbourne problem gambling counselling centre.

**Results**

All participants were current gamblers and all completed a measure of problem gambling (the SOGS). Problem gambling symptomatology ranged from zero to 18 with an average score of three (the SOGS has a possible range of 0-20). Thirty-two participants were designated as problem gamblers with a SOGS score of five or more (as recommended by Lesieur and Blume, 1987). Of these 21 were male gamblers and 11 were female gamblers.

A series of hierarchical multiple regressions were used to test the hypothesised model that the relationship between dysphoric mood and problem gambling would be moderated by avoidance coping, such that participants who scored high on a measure of dysphoric mood and high on the use of avoidance coping would exhibit substantially more problems than those who were high on only one of the predictors. These regressions also assessed predicted relationships between problem gambling and (a) dysphoric mood, and (b) avoidance coping. Separate regressions were performed for each mood state because of the high degree of multicollinearity between the various dysphoric states which would substantially alter results if they were entered into the same regression. For each regression, the mood state and avoidance coping were entered at stage one with the interaction between mood state and avoidance coping entered at stage two. All analyses were performed separately for males and females in order to examine the relationships between mood, coping and problem gambling for each gender.
To facilitate interpretation of the interactions, the loneliness by avoidance coping interaction has been presented graphically using the regression equation to generate a predicted score on problem gambling for each group, representing all possible combinations of low and high (Cohen & Cohen, 1983). Low and high scores were operationalised using one standard deviation below the mean and one standard deviation above the mean respectively, giving two regression lines.

Hierarchical Regression Analyses for Females

A summary of the regression results for female gamblers is shown in Table 1.

Table 1.
Summary of Hierarchical Regression Analyses Showing Main and Interactive Effects of Dysphoric Mood and Avoidance Coping on Problem Gambling for Females

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>Loneliness</th>
<th>Anxiety</th>
<th>Depression</th>
<th>Boredom</th>
<th>Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$R^2\Delta$</td>
<td>$\beta$</td>
<td>$R^2\Delta$</td>
<td>$\beta$</td>
<td>$R^2\Delta$</td>
</tr>
<tr>
<td>Stage 1</td>
<td>.27***</td>
<td>.24***</td>
<td>.24***</td>
<td>.19**</td>
<td>.16**</td>
</tr>
<tr>
<td>Mood</td>
<td>.39***</td>
<td>.34**</td>
<td>.36**</td>
<td>.29**</td>
<td>.19**</td>
</tr>
<tr>
<td>AC</td>
<td>.25*</td>
<td>.27*</td>
<td>.22*</td>
<td>.21*</td>
<td>.30**</td>
</tr>
<tr>
<td>Stage 2</td>
<td>.28***</td>
<td>.10**</td>
<td>.05*</td>
<td>.07*</td>
<td>.06*</td>
</tr>
<tr>
<td>Mood</td>
<td>-2.05***</td>
<td>-1.01*</td>
<td>-.67</td>
<td>-.93*</td>
<td>-.78*</td>
</tr>
<tr>
<td>AC</td>
<td>-1.56***</td>
<td>-.12</td>
<td>-.06</td>
<td>-.31</td>
<td>-.14</td>
</tr>
<tr>
<td>Mood x AC</td>
<td>3.46***</td>
<td>1.53**</td>
<td>1.19*</td>
<td>1.57*</td>
<td>1.20*</td>
</tr>
<tr>
<td>Total $R^2$</td>
<td>.55***</td>
<td>.34***</td>
<td>.29***</td>
<td>.26***</td>
<td>.22***</td>
</tr>
</tbody>
</table>

Note. $N=83$, $R^2\Delta=R^2$ change, $\beta=$Beta, AC=Avoidance Coping, $p<.10^+$, $p<.05^*$, $p<.01^{**}$, $p<.001^{***}$

In the first regression loneliness and avoidance coping at stage one accounted for 27% of the variation in problem gambling ($F(2,75)=13.99$, $p<.001$) and as expected both factors significantly predicted problem gambling, lonely women and women who had a tendency to use avoidance coping tended to experience more gambling problems. At stage two, the interaction between loneliness and avoidance coping was entered and accounted for a significant amount of the variance in problem gambling (28%) ($F$ change $(1,74)=46.69$, $p<.001$). All three predictors were significant at stage two with the interaction being the most important predictor. The interaction is shown in figure 1. As can be seen female gamblers who were high on both avoidance coping and loneliness showed substantially more symptoms of problem gambling than female gamblers high on only loneliness or avoidance coping.
An examination of the second regression showed that anxiety and avoidance coping together accounted for 24% of the variation in problem gambling ($F(2,77)=11.81, p<.001$) with both significantly related to problem gambling. As expected, women who were more anxious and who used more avoidance coping tended to experience more gambling problems. At stage two, the interaction between anxiety and avoidance coping was entered and accounted for an additional 10% of the variance in problem gambling ($F$ change $(1,76)=11.67, p<.01$). Avoidance coping no longer significantly predicted problem gambling at this stage, however the interaction and anxiety both independently predicted problem gambling, with the interaction the most important predictor. Again, female gamblers who were high in both avoidance coping and anxiety tended to show substantially more symptoms of problem gambling than those high in only one variable.

An examination of the third regression showed that depression and avoidance coping together accounted for 24% of the variation in problem gambling ($F(2,77)=12.16, p<.001$) with both variables independently predicting problem gambling. As expected, women who were more depressed and tended to rely on avoidance coping had a greater tendency to show more problems with gambling. At stage two, the interaction between depression and avoidance coping again accounted for a significant amount of the variance in problem gambling (5%) ($F$ change $(1,76)=5.85, p<.05$). However, only the interaction between depression and avoidance coping remained significant at this stage. Again female gamblers high on both avoidance coping and depression tended to show more problem gambling symptoms than those high in only depression or avoidance coping.

For the fourth regression, boredom and avoidance coping accounted for 19% of the variance in problem gambling at stage one ($F(2,77)=9.07, p<.001$) but only boredom significantly predicted problem gambling, women who were bored tended to reveal more gambling problems. The interaction between boredom and avoidance coping was entered at stage two and again accounted for a significant increase in the prediction of problem gambling (7%) ($F$ change $(1,76)=6.65, p<.05$). At this stage the interaction remained the only significant predictor of problem gambling, although the relationship between boredom and problem gambling approached significance. In
common with the above regressions, the female gamblers high in avoidance coping and boredom had a tendency to show substantially more symptoms of problem gambling than those high in just one variable.

Finally, in the fifth regression stress and avoidance coping accounted for 16% of the variation in problem gambling at stage one ($F(2,77)=7.40, p<.01$) with avoidance coping significantly predicting problem gambling and the correlation between stress and problem gambling approaching significance. Women who had a tendency to use avoidance coping tended to experience more gambling problems. At stage two, the interaction between stress and avoidance coping resulted in a significant increase in prediction of problem gambling (6%) ($F_{\text{change}}(1,76)=5.95, p<.05$). At this stage only the interaction between stress and avoidance coping was significant in predicting problem gambling, although stress again approached significance in prediction. The interaction was similar to those in the previously reported regressions with female gamblers who were high in both avoidance coping and stress showing substantially more problems with their gambling than those high on only avoidance coping or stress.

**Hierarchical Regression Analyses for Males**

A summary of regression results for male gamblers is shown in Table 2.

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>Loneliness</th>
<th>Anxiety</th>
<th>Depression</th>
<th>Boredom</th>
<th>Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$R^2$</td>
<td>$\Delta$</td>
<td>$\beta$</td>
<td>$R^2$</td>
<td>$\Delta$</td>
</tr>
<tr>
<td>Stage 1</td>
<td>.10*</td>
<td>.04</td>
<td>.06</td>
<td>.07*</td>
<td>.07</td>
</tr>
<tr>
<td>Mood</td>
<td>.31*</td>
<td>.18</td>
<td>.24*</td>
<td>.26*</td>
<td>.26*</td>
</tr>
<tr>
<td>AC</td>
<td>.01</td>
<td>.03</td>
<td>.02</td>
<td>.02</td>
<td>.02</td>
</tr>
<tr>
<td>Stage 2</td>
<td>.03</td>
<td>.02</td>
<td>.01</td>
<td>.04*</td>
<td>.04*</td>
</tr>
<tr>
<td>Mood</td>
<td>1.0*</td>
<td>.85</td>
<td>.56</td>
<td>1.03*</td>
<td>.55</td>
</tr>
<tr>
<td>AC</td>
<td>.60</td>
<td>.16</td>
<td>.11</td>
<td>.45</td>
<td>.12</td>
</tr>
<tr>
<td>Mood x AC</td>
<td>-1.10</td>
<td>-.76</td>
<td>-.37</td>
<td>-1.04*</td>
<td>-.35</td>
</tr>
<tr>
<td>Total $R^2$</td>
<td>.13*</td>
<td>.06</td>
<td>.07</td>
<td>.12*</td>
<td>.08</td>
</tr>
</tbody>
</table>

*Note. N=72, $R^2_{\Delta}=R^2$ change, $\beta=\text{Beta}, AC=\text{Avoidance Coping}, p<.10^*, p<.05^*$

As can be seen, the picture is quite different for males compared to females. Contrary to expectations, none of the predicted mood by avoidance coping interactions occurred, although the interaction between boredom and avoidance coping to predict problem gambling approached significance. Also contrary to expectations, avoidance coping failed to predict problem gambling in any of the regressions.

However, some of the relationships between dysphoric mood and problem gambling were significant. At stage one of the regression, loneliness was significantly correlated with problem gambling. Men who were lonely also tended to have more problems with their gambling ($t=2.54, p<.05$). This relationship remained significant at stage two of the regression and the three predictors (loneliness, avoidance coping and the interaction between loneliness and
avoidance coping) together accounted for 13% of the variance in problem gambling ($F(3,67)=3.43$, $p<.05$).

Similarly, boredom was significantly correlated with problem gambling at stage one of this regression. Men who were bored tended to show more gambling problems than those who were not very bored ($t=2.05$, $p<.05$). This relationship also remained significant at stage two of the regression and the three predictors together accounted for 12% of the variance in problem gambling ($F(3,67)=2.90$, $p<.05$).

Finally, stress significantly predicted problem gambling at stage one of this regression. Men who were very stressed tended to show more problems with their gambling than those who were not very stressed ($t=2.05$, $p<.05$). However, this relationship was no longer significant once the interaction between stress and avoidance coping was taken into account. The three predictors combined were only able to explain 8% of the variance in problem gambling at stage two, and together they were unable to significantly predict problem gambling ($F(3,67)=1.94$, $p>.05$). Neither depression nor anxiety were significantly correlated with problem gambling.

**Discussion**

These results suggest that for female gamblers both avoidance coping and dysphoric mood are important factors in explaining problem gambling. Depression, anxiety, loneliness, boredom and avoidance coping all independently predicted problem gambling. As expected, female gamblers who felt more dysphoria or who had a high reliance on avoidance coping tended to experience more symptoms of problem gambling. These results supported prior research which has found that female gamblers with problems showed elevated levels of dysphoric mood compared to those without problems (Becoña et al., 1996; Ohtsuka et al., 1997; Trevorrow & Moore, 1998). Similarly, the positive relationship between avoidance coping and problem gambling supported prior research by Di Dio and Ong (1997) which found that avoidance coping directly predicted problem gambling. The results also supported those of Getty et al. (2000) and Scannell et al. (2000) who found that females with problematic gambling showed greater reliance on avoidance coping than those with less problematic gambling.

Additionally, it would appear that a combination of high dysphoria and high avoidance coping may lead to an increased vulnerability to problem gambling for female gamblers. Female gamblers who were high on both dysphoria and avoidance coping tended to experience substantially more symptoms of problem gambling than those high in just one variable. These results supported prior qualitative research that found that female gamblers talk about gambling specifically to escape dysphoric feelings (Brown & Coventry, 1997; Johnson & McLure, 1997).

The results for male gamblers were very different. Males who were very lonely, bored or stressed tended to experience more symptoms of problem gambling, however, neither anxiety nor depression were able to significantly predict problem gambling for male gamblers. The significant results gave some support to research by Blaszczynski, McConaghy and Frankova (1990) which found a male dominated sample of pathological gamblers were significantly higher in boredom compared to a control group of patients without addiction problems. However, the current study’s finding that no relationship existed between problem gambling and either anxiety or depression contradicted earlier findings. McCormick, Russo, Ramirez and Taber (1984) found 76% of male pathological gamblers in their sample were suffering from depression. Similarly, Blaszczynski and McConaghy (1988) found their male dominated sample of pathological gamblers to be higher in both depression and anxiety compared to a normative sample. Together, these inconsistent findings cast some doubt on the applicability of negative mood in explanations of problem gambling for males.
Secondly, contrary to predictions avoidance coping was not significantly related to problem gambling for males. These results appear to be contrary to prior research by McCormick (1994) who found male problem gamblers used significantly more avoidance coping compared to male non-problem gamblers. The results also appear to contradict those of Getty et al. (2000) who found problem gamblers as a whole used significantly more avoidance coping compared to non-problem gamblers, but that male problem gamblers did not differ from female problem gamblers in the use of this style of coping.

One explanation for these apparently contradictory findings may be the more sophisticated methods of analysis used in the current study. The regression analysis used in this study scrutinised the relationship between avoidance coping and problem gambling for male and female gamblers separately rather than simply comparing the average level of avoidance coping used by male and female gamblers. Possibly avoidance coping is high on average in male problem gamblers, but is not predictive of problem gambling symptomatology. The current study’s results were also contrary to those of Di Dio and Ong (1997) who found that avoidance coping did significantly predict problem gambling. However they included both male and female gamblers in their regression that may account for the difference in results.

Finally, problem gambling could not be predicted via an interaction between dysphoric mood and avoidance coping for male gamblers. This suggests that the combination of high dysphoria and high avoidance coping does not substantially increase vulnerability to problem gambling for male gamblers.

These substantially different findings for male and female gamblers suggest female problem gamblers may be motivated to gamble for qualitatively different reasons than male problem gamblers. The results for female gamblers provide strong support for an interactional model and suggest that female gamblers who are high in dysphoria and have a tendency to use avoidance coping may be particularly vulnerable in terms of problem gambling. It is possible that, as suggested by prior research, there is a tendency for some female problem gamblers to gamble specifically to escape dysphoric emotions (e.g. Brown & Coventry, 1997; Pierce et al., 1997). In contrast there is little evidence to suggest that the combination of high dysphoria and high avoidance coping significantly increases the risk of problem gambling in male gamblers. Although males who were very lonely, bored or stressed tended to display more problem gambling, there was no evidence to suggest they were motivated to gamble specifically to escape these emotions.
References


Political culture and gambling policy: A cross national study

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Abstract

The concept of "Political Culture" gained prominence in the discipline of Political Science in the 1960s. Two major publications (Almond and Verba's 'The Civic Culture', and Daniel Elazar's 'American Federalism: A View from the States') brought the notion into a central place in political studies. Unfortunately many studies have treated "Political Culture" as a dependent variable, seeking only to describe various cultures, and to indicate factors generating the cultures. They did not go far in considering "Political Culture" as an independent variable and linking culture to other political phenomena--specifically policy making. Moreover, most political culture studies have focused upon singular jurisdictions. This paper seeks to find relationships between political culture and policy making on the gambling issue in a multitude of jurisdictions including Nevada and California, two adjacent states of the United States with divergent historical cultures but with converging contemporary policies on gambling, and also in Great Britain, and Israel. While the stages of research in political culture has not advanced to allow the concept to be part of a tight knit theory from which an array of testable hypothesis can flow, the use of the concept with common terminology can be helpful in understanding policy developments in gambling in a wide variety of jurisdictions.

Political Culture and Gambling Policy: A Cross National Study

This paper presents four case studies. Each looks at policy on gambling and focuses upon relationships of policy and political culture. Political culture is a collective mind set or patterns of thought that people have toward political objects: the political community, forms of government, leadership, political parties, political activity, the rules of participation in politics, feelings of personal obligation and efficacy, and their attitudes toward fellow citizens as political actors.
While gambling is endemic, its acceptance may reflect or be reflected by how a specific people view their place in the cosmos, their sense of personal efficacy in life, their worth vis a vis fellow citizens, and their acceptance of external authority over their personal behaviors. We should expect to find that gambling policy is at least in part a function of the collective belief patterns encompassed in the concept of political culture.

This is not the first effort to juxtapose the concept of culture with gambling in a comparative or international context. In 1996 Australian economist Jan McMillen edited a collection of fifteen essays written especially for Gambling Cultures: Studies in History and Interpretation. However, the essays did not focus upon political culture, nor did they examine policy decisions on gambling per se, but rather they were an eclectic collection of topics such as legalization of vice, illegal gambling in Great Britain and Australia, popular culture images of gambling, bingo playing and class and gender, interpretations of gambling compulsions as a disease, and regulatory models for the control of gambling. One essay looked specifically at political culture and gambling policy in the Netherlands, but that essay stood alone looking at the concepts that we explore here in a comparative format.

Overall the McMillen collection of essays which individually are quite meritorious are more random treatments of questions related to gambling rather than systematic attempts to develop relationships between gambling policy and culture. On the other hand, this paper focus attention on the concept of political culture tying it to public policy questions regarding the legalization of gambling. To the extent that we show success in the effort we are building upon the foundations of the work set in place by McMillen and her authors.

Four jurisdictions are selected for case studies. Nevada is the quintessential gambling jurisdiction in the world. For most of the past century the renegade state was America's sole jurisdiction permitting casino gambling. Juxtaposed at its border is the state of California that stood as a beacon of moral leadership for other states. In this leadership role, California spurned the wild living of its neighbour state for most of its history. Hard core gambling was banned as anathema to the "good life," until the 1980s and 1990s. The state then embraced a lottery and opened the door wide for Native American casinos. Great Britain staunchly opposed most forms of gambling until 1960 when Parliament acquiesced to recommendations that legalization could stifle illegal gambling. The new state of Israel adopted a passive lottery without controversy, however other gambling policy was avoided until recently after a newly autonomous Palestine Authority allowed a casino to operate adjacent to the Israeli lands. The issue has been joined, but is still unresolved.

The concept of political culture was ingrained in classical works of political philosophy. However, as an explicit concept to orient understandings of politics political culture came to the fore in the 1960s. Several writers contributed to the development of this explanatory concept. (Almond and Coleman, 1960; Almond and Verba, 1963; Banfield, 1958; Clark and Wildavsky, 1990; Elazar, 1966 and 1972; Pye, 1966; Pye and Verba, 1965; Thompson, Ellis and Wildavsky, 1990; Wildavsky, 1998). Of these, our initial attention will highlight ideas from Almond and Verba's five-nation study The Civic Culture (1965) and Daniel Elazar's American Federalism: A View from the States (1966, and 1972).

Elazar emphasized differences in political cultures within the United States. He found the differences to be historical sources to explain variations in habits, perspectives, and attitudes that exist to influence political life (Elazar, 1972, 85). Elazar discerned three dominant cultures. These are: the (I)individualistic, (M)oralistic, and (T)raditionalistic.

The Individualistic (I) Culture envisions a democratic order expressed through a market place of issues. Government responds to demands of groups of citizens. Political participation is not
encouraged, as politics is an activity reserved for "professionals," not amateurs. People who seek political office do so to control the distribution of rewards of government, not to pursue any ideology. Politics is often seen as corrupt or dirty. It's like horse-trading. (Elazar, 1972, 86-89).

The Moralistic (M) political culture is sharply different. The M culture was brought to the New World by the Pilgrims and Puritans who set up religious colonies. While the I culture stresses material gain, the M culture emphasizes the commonwealth. Politics is a lofty pursuit in a search for the "good society." Although politics is a quest to exercise power for the betterment of all--for the general welfare. Citizen participation is an essential ingredient. Those who serve in government assume high moral obligations and there is little tolerance for corruption. (Elazar, 1972, 89-92).

The Traditionalistic political culture (T) had roots in British royalty. It persisted past Revolutionary years in the plantation South. The T culture is based upon an ambivalent attitude toward the marketplace coupled with an elitist conception of society. The T political culture reflects pre-commercial attitudes that accepts a largely hierarchical society. Those at the top of the social order take a dominant role in government. Like the M culture, it accepts government as a positive actor in society. But that role is defined as keeping the existing social order. "Good government" involves the maintenance of traditional patterns. Those who do not have a definitive role to play in the political system are not expected to become active in politics. (Elazar, 1972, 92-94).

Gabriel Almond and Sidney Verba" The Civic Culture is built upon data drawn from a cross-national questionnaire administered to approximately 1000 persons each in Great Britain, Germany, Italy, Mexico, and the United States. The study focused upon popular attitudes toward politics. The questions fell into three categories: (1) Cognition: did the citizen know about the political system? Was he or she knowledgeable about the persons in leadership, the processes of government, and the policies of the government? (2) Affect: how did the individual feel about the political system? Did the system have a marked impact upon their lives? And, (3) Evaluative: how did citizens evaluate the roles the citizens should play in the system. Should they participate in politics? (Almond and Verba, 1966).

The results led Almond and Verba to conceptualise three political cultures: the parochial, subject, and participant. In the parochial, the individual knew nothing about the political system and expected nothing from it. Some remote African tribes would represent examples of this. In the subject culture, the individual had knowledge about the system, but felt no influence. This describes many political systems in less developed communities. In the participant culture, the individual knew about the system, and believed citizens should be able to exercise influence. The authors acknowledged that within most systems there were aspects of each culture. The United States was a participant culture, while the British system had mixed participant and subject attributes as there were strong strains of deference to authority. Both approximated the cultural conditions conducive to the presence of the "civic culture," conditions necessary for sustaining democracy. (Friedberg, Lutrin, and Thompson, 2001).

Gambling in Great Britain

Gambling policy has a long history in Britain. Class status often shaped the policy. In 1388 Richard II introduced laws banning gambling by labourers. Subsequent monarchs stopped gambling as it interfered with development of archery skills by the military. Nonetheless, in 1566, a lottery was authorized. (Jones, 1973, 21-23). In 1612 one lottery was conducted to gain financial support for Virginia colony. (Thompson, 1997, 89-90). During the seventeenth and eighteenth centuries gambling flourished as resorts such as Bath attracted play from royalty. A fear that nobility would lose property to new rich and gambling scoundrels led to the Statue of Anne in 1710 which rendered gambling debts unenforceable in courts. Gambling losses by nobility continued as did further
Corrupting effects of gambling peaked during the regency and reign of George IV (early 18th Century), and following his reign, Queen Victoria presided over a complete ban of casinos and lotteries. Some betting was permitted for horse races. (Miers, 1999, 383-4).

The legal ban on gambling continued into the mid-point of the 20th century. Then, a Royal Commission adopted a perspective on gambling that emphasized personal liberty. There was a recognition that the wealthy could make legal bets with agents who went to horse tracks, but that the poor were betting illegally with street bookies. Gambling, per se, was not seen to have adverse social consequences. The Commission accepted the notion that gambling was a victimless crime, and as such. There was no role for government in the transactions. (Miers, 1999, 384).

In 1960 gambling laws incorporated the new perspectives. A Street Betting Act recognized the desire for the "common man" to make wagers, and merely required bookies to move their operations off the streets and into commercial buildings. Persons formerly engaged in illegal activities were now legal businessmen. The 1960 law recognized that the public wanted casino games. These were permitted for charities, if the games offered players even odds--that is, there was no "house advantage." Unfortunately, 1960 was also the year that Castro closed the casinos of Havana. Many mobsters who ran these casinos examined the new policy in Great Britain, and they figured they had a place they could move--London. (Miers, 1999, 385).

The success of the betting shops was immediate, the story of the "charitable" casinos was something else. Mobsters and others quickly found loopholes, and London became a center of high stakes action. By the mid 1960s there were over 1200 casinos in England, Scotland, and Wales many engaged in dishonest practices. Parliament was prodded into action in 1968. A new casino law promised strict regulations. Casinos were allowed only if a license applicant could demonstrate that there was an existing demand for gambling activity. New casinos had to show that existing casinos are crowded; they also used police reports of illegal gambling to demonstrate a desire for more gambling outlets. The casino could only service an "unstimulated" demand for games, therefore, advertising was prohibited. Players had to be screened and admitted to membership. They had to be members for 48 hours before they could gamble. These facilities could hardly market products to tourists under these rules. Indeed, if the casino was located within a hotel, the facility could be entered only by an outer door, and not by any door within the hotel. As slot machines were thought to be devices which could entice non-gamblers, the casinos were not allowed to have more than two machines. Casinos were not allowed to offer credit, and were limited cashing checks. Casinos could not have live entertainment, and liquor was not allowed near gaming. (Miers, 1999).

Still, the government was wary about being supported in any degree by casinos. Hence, there were no casino gaming taxes. Like other businesses, casinos would pay taxes on their net profits, and also pay property taxes based upon the costs of their buildings. Most casinos located on backstreets in order to minimize taxes. The rules were strictly enforced. In 1979 and 1980 three major casino companies each lost licenses as a result of activities designed to entice players away from competition. As a result of the scandal, there was a demand for even stricter rules, and Parliament adopted a gambling win taxes on a sliding scale up to 33% of the win. (Miers, 1999).

The casino regulatory structure which was designed to protect the public from devious tactics remains in place today. Yet over the past 33 years, policy makers have almost silently acquiesced in the establishment of a slot machine industry that operates in arcades throughout the country, often offering gaming enticements to children.

Lotteries were closed down in the 1840s, however, a new lottery schemed in 1915--the Premium Bond lottery. This lottery was unlike others as it carried a public protection and a patriotic
philosophy with it. The player does not "gamble." Rather the player buys a bond that can be cashed in for full value at any time. However, as long as the bond is held by the player, the player participates in drawings for prizes. The bonds were promoted as a way to encourage savings. In 1993 government succumbed to another more pragmatic philosophy--desire to raise revenue. A traditional lottery was reinstated. Soon the national lottery was competing with the Japanese bank lottery as the leading gambling enterprise in the world. Both Conservative Prime Minister John Major and his successor Laborite Tony Blair have praised the lottery as a wonderful means to raise money. They indicate no concern for players who were losing the funds gathered for "good causes." (Miers, 1999; and Miers, 2001).

The Almond and Verba study concluded that Great Britain was a deferential "civic culture." Britain has a balance of subject and participant roles. There was pride in the system and satisfaction with governmental performance. Increased participation, which came with the expansion of suffrage, had not destroyed subject orientation. (Almond and Verba, 1963, 314-315). Much has changed since the first Almond and Verba study. For example, in 1975, Prime Minister Harold Wilson felt he had to obtain the approval of the electoral in order to take Britain into the European Economic Union. For the first time, parliament would not decide a major issue, rather it was refereed to the people. In 2001 Prime Minister Blair indicated he would have a referendum on whether Britain would adopt the Euro as its basic currency.

The story of gambling in Great Britain has also been the story of policy that has been made with an eye to the public will (as in participant cultures for the work of Almond and Verba) but also a strong element of the subject notions of deference. The notions guiding the policy also rely upon ideas drawn out of the liberal and utilitarian philosophies impacting upon the polity in the Nineteenth Century. The people could decide when certain actions in their own lives would lead to pleasure and pain and they would pursue behaviors calculated to result in an excess of pleasure over pain. Similarly, government should not seek to substitute its judgement for that of the people unless it was clear that action was necessary to assure the "greatest good" for the "greatest number." In the realm of gambling policy, the government has moved gingerly among postures of protectionism and patronizing the citizenry and postures of fostering liberty in personal actions, often at the same time. We see the cultural values found in Elazar's Traditional culture model as well as ideas from his Individualistic culture known as pragmatism.

Israel

Serious analyses of Israeli political culture have been offered in recent decades. Etzioni-Halevy and Shapira's Political Culture in Israel (1977) discussed cleavage and integration among Israeli Jews. In Civil Religion in Israel (1983) Liebman and Don-Yehiya analyzed the role of traditional religion in the establishment of the state of Israel and changes occurring in the Eighties. Aranoff's Israeli Visions and Divisions (1989) also examined changing political culture, with particular focus on the 1970s and 1980s. In Wither the State (1979) Sharkansky finds a commitment to a full-service state in the culture of Israel. This was based on a Biblical emphasis upon charity, as well as a Zionist ideal of building a new society. Israel also sought to have a strong state to protect people who had suffered from "two millennia of statelessness." (Sharkansky, 1979; Sharkansky 1999; see also Caiden, 1970).

Zionism was a response to historical persecution and forces of assimilation. According to Rubinstein, Zionists did not want to relinquish the special marks of Judaism--language, treasures of tradition, reverence for ancestors. Arian also viewed Zionist ideology as a cornerstone of political culture. (Rubinstein, 1997; and Arian, 1998).

There is an inherent contradiction in the Zionism which helps in understanding policy toward gambling. Aronoff suggests that the ancient myth proclaiming that the Jewish state should be a "light
to the nations," was part of Zionism. He argued that given the political and military demands of sovereignty this goal was unrealistic. Moreover it invited a double standard and the criticism of other nations. The goal to be a moral vanguard contradicted another Zionist mission to be "a normal nation like all nations." most Israeli politicians are pragmatic and can assess ideology and yet meet the demands of political reality. The population is less ideological, but still shows deference to the ideological rhetoric of the politicians, just as it does to their policy decisions. Arian concludes, "Israel's political culture demonstrates a fascinating mix of ideology and pragmatism." (Arian, 1998).

Although mixed the Israeli political culture fits well the criteria of Elazar's (M) culture. The Biblical intonation that "Israel shall be a light onto the nations" sets a big standard. It is widely quoted and known, but it is hardly the standard that politicians have embraced as the modus operandi. However, Zionism historically and in contemporary times embraced strand of socialism. Israel has an extensive welfare systems. No other nation provides as many services to new immigrants. But one important change that has occurred is a shift away from a collective ethos. There are now choices and options in university education, travel, communications, and entertainment to name a few. In a changing cultural climate, legalized gambling becomes a realistic option. (Arian, 1998, 2,3)

Almond and Verba would find Israel approaching the ideal "civic culture." Arian argues that although a personal sense of efficacy is not particularly high, there is little evidence of alienation. The participant role is highly developed and citizens are attentive to politics. While there is a system pride and self-assurance, there is also frustration with politicians and the bureaucracy. A desire for order, security and leadership persists. Public opinion can be brought to support the dominant position of the appropriate leaders when the proper symbols and appeals are used. (Arian, 1998, 376-381). Thus there is a necessary deference to authority evidenced in a willingness to pay the heaviest tax burden in the world as well as a burden of military service and combat losses.

Casino gambling has been discussed since the early 1990s. Public committees, private bills in Knesset, and discussions of the Economic Committee of the Knesset, are notable. In 1990 a joint committee of the municipality of Eilat and the Israel National Lottery (Report, 1995) recommended the establishment of a casino and a conference center in Eilat. The casino was to be operated by the National Lottery. Income from the casino would be given to the local government. In 1991 a second committee recommended a casino open in Eilat because the Egyptians were operating a casino in nearby Taba. (Report, 1995).

Two private bills to legalize casinos failed in the Knesset in 1994 and 1995. Their purpose was to stem growth of illegal gambling and to compete with casinos in nearby jurisdictions. (Report, 1995). The Economic Committee of the Knesset also considered the issue in 1994 and 1995, with most members making favourable comments (Report, 1995).

The last proposal to legalize casino gambling was set on the agenda by a third committee--the Public Committee to Examine the Issue of a Casino in Israel. (Report, 1995, 78-107). The failure of all the efforts to legalize casinos illustrates aspects of the culture of Israel and one way of dealing with disputes: study, debate, and non-decision.

Israel is a country with lots of gambling both legal and illegal. Kiosks located in every neighbourhood sell tickets for the twice-weekly national lottery game, soccer pools, and instant lottery games. The government takes most of the revenues from the games, but player wins are not subject to income taxes. There has been a casino in Jericho just thirty minutes from Jerusalem and an hour and half from Tel Aviv, and in Tab, Egypt, minutes from Eilat. It operated from 1998 until the Intifada that began in Fall, 2000. (Friedberg, Thompson, and Lutrin, 2001). Gambling boats sail from Eilat and Haifa. The New York Times (July 7, 2000) had described the Jericho casino as
"Israeli Patronized, and reported that it represented the largest and most lucrative investment of the Palestinian Investment Fund.” Advertisements in Israeli newspapers tout the features of the floating casinos, including their provision of Kosher food and entertainment. One company operating a casino boat offered a bond issue on the Tel Aviv stock exchange. Also a sizeable number of the Israelis travel abroad in order to participate in casino gambling. (Report, 1995). Illegal casinos operate in various locations. They receive only cursory and occasional attention from the police. There is also anecdotal evidence that Israelis—and perhaps Jews—have more than the average inclination to gamble. An article on gambling in The Jerusalem Report (August 16, 1999) carried the title, “The Jewish Vice,” and a subtitle, “Gambling is the 'drug of choice' for the Chosen People.” Overall, it is estimated that Israelis spend one billion dollars a year on illegal gambling, and $900 million on lotteries. The Jericho casino won a million dollars a day. Israelis also gamble heavily on some 700 gambling web sites that offer chances on sports events. (New York Times, July 14, 2000, Internet Edition).

While engaged in much gambling, Israel has nevertheless shied away from authorizing legal casinos. It is a country practiced in the arts of coping with serious problems--like the mutual but unacknowledged shared management of Arab neighbourhoods of Jerusalem with Palestinian Authority, or the perennial disputes between religious and secular Jews--by means of ambiguity and purposeful non-decision. (Sharkansky, 1999). The question of a casino has come on to the national agenda, most recently with the support of the Prime Minister and Finance Minister. While these position holders are at the top of the national pecking order, their support of an issue does not assure adoption. Their casino proposal languishes somewhere down on the list of national priorities.

The third committee of inquiry to consider a legal casino met in 1995. The committee surveyed the legal and illegal options facing Israeli gamblers, considered problem gambling as well as economic issues, and proposed the development of casinos with certain safeguards. The report generated controversy, most prominently from the religious community (Orthodox and ultra-Orthodox). The issue moved higher on the political agenda three years later as a Palestinian casino, operated by Casinos Austria in the city of Jericho. That casino had attracted a nightly flow of tour buses and private cars from Israeli cities. The Prime Minister and Minister of Finance wondered "Why allow some of our money to flow to the Palestinians, when we might be able to funnel it to an Israeli casino, save the outflow of foreign currency, take some of the proceeds in taxes, and help the economy of a depressed region?"

Arguments about casinos are trivial in comparison with other problems. The former Prime Minister, Ehud Barak, 1999-2001, was preoccupied with negotiations with Syrians and Palestinians, as well as a contentious pull-out of troops from Lebanon, as well as turmoil with religious parties about Sabbath observance and the funding of religious schools.

During the Barak administration there was a proposal for a casino in the depressed Negev desert town of Mitzpe Ramon. The first Prime Minister David Ben Gurion had established a number of settlements in the Negev. He directed tens of thousands of immigrants to them in the late 1940s and 1950s, and chose a desert site for his permanent retirement home. Four decades later, a continued poverty and chronic unemployment of the desert towns is a national embarrassment. Programs to encourage talented teachers to work there had limited success, and subsides for industries have gone to low-skill plants that are economically marginal. The more capable youth from the region have failed to return home after the army, and have found jobs in the center of the country. Despite Labor Party sentiments in behalf of social programs, the residents of the Negev have supported the more nationalist and populist Likud, or the ethnic and religious SHAS parties.
Opposition to gambling comes from a variety of sources and reflects a moralistic political culture. Newspaper accounts report religious and secular, Jewish and Arab members of Knesset who usually compete with one another on basic issues of national security and economic policy who sit around a table and share stories about individuals led to personal disaster on account of gambling. A day after the Prime Minister and Finance Minister proposed the casino for Mitzpe Ramon, 13 government ministers indicated their opposition and only seven supported it. The floor leader of the Prime Minister's own party said that he would cut off his right hand before raising it in support of a casino. Geographic reasons also weakened the Prime Minister's position. The Director General of the Council to develop the Galilee, in the North, asked why a casino could not be opened in his region. While the Israeli Prime Minister was proposing a casino, Palestinian authorities had promoted their Jericho casino and also tweaked religious Jews by suggesting that they would provide civil marriages in Jericho for Israelis not wanting to marry under the procedures of the official rabbinate (Yediot Aharonot, 1999; Israel Television News, 1999).

Economic profit is the principal argument used by the advocates of a casino, but the argument is not entirely one-sided. With so much gambling already available, there is a prospect of market saturation at some point. (See Thompson, 1997). While policy makers do not like to see Israelis leaving money at the Palestinian gambling tables, large numbers of Israelis do not seem to mind. This kind of "aid" to the Palestinians is less annoying than the economic "aid" involved in the many Israeli automobiles that are stolen and broken up in Palestinian fields, with their components sold to Israeli repair shops.

There is a moralistic approach to gambling that has ancient roots. The Hebrew Bible curses witches and fortune tellers. Post-biblical compilations of law--the Mishnah, Talmud and Shulcan Aruch--prohibit games of chance, equate gambling with robbery, and include gamblers among those unqualified to testify in proceedings (Thompson 2001). Gambling is said to attract individuals to the material and away from spiritual concerns, as well as inducing personal irresponsibility. The committee appointed to consider a casino noted these considerations, but also found that religious politicians had not mounted a campaign against established lotteries and football pools, and that they accept some of the proceeds from legalized gambling for the support of religious programs (Report, 1995). The moralistic approach could be sometimes flexible. A newspaper commentator was more outspoken in accusing religious and other opponents of hypocrisy for resisting the proposal of a casino but for not campaigning against existing legalized gambling or illegal operations. (Eshet, 1999).

On the practical level, the failure to decide about a casino seems, meanwhile, to hurt no one. It is less an act that rewards political power than an evasion of action where politicians are divided, none of the advocates seem intense, and many are busy with more pressing issues. To date, officials have resolved the issue negatively, without having to make a formal decision. (Sharkansky and Friedberg, 1998; Sharkansky and Friedberg, 2000; and Lutrin, Thompson and Friedberg, 2001).

Two American States

California and Nevada began (as non-indigenous societies) with gold and silver strikes. Mining communities consisted of unattached males seeking to get-rich-quick. Gambling, alcohol, and prostitution flourished in early years of both states. However, California "changed," as mining abated and production industry, agriculture, and international trade grew. New populations came with strong families. They sought better quality lives, not just quick riches. The society began to embrace the M culture and developed into a model of the participant culture. California, in a sense, "grew up." Nevada did not. (Lutrin and Thompson, 2000).

The renegade spirit of mining days persisted in Nevada--and still makes its impact on the policy making. Mining opportunities waned in the 1870s and 1880s, but new populations did not come into
Nevada. Instead there was a depopulation of the state. Nevada did not have good agricultural land, and the state was isolated geographically by both mountains and deserts rendering infeasible commercial enterprise such as manufacturing and trade. Nevada was a state and this offered political opportunities to certain interests, including California railroad magnates. Through the Nevada legislature they controlled the election of U.S. Senators. To fight off voices suggesting that the Nevada lose its political status as a state, the leaders welcomed any notion, however farfetched, that might generate economic activity. The state accepted legalized prostitution, boxing matches, sham corporation laws, and in the Twentieth century easy divorce procedures. Mining experienced boom and bust periods. Whatever the state tried, the political establishment and the population defended against all critics. Nonetheless, it was not until the state endorsed wide open casino gambling in 1931, that the state found a formula for economic growth. No American state finds itself so strongly tied to a single industry as Nevada is to gambling. As the casino industry got onto its feet and began to flourish was attacked by outside critics. (Thompson, 1997; and Thompson, 2001).

Nevada has fought off critics to gambling with policies and pressures exerted by its representatives in Congress. In defence of the status quo, state leadership has not sought to be consistent to any policy except the policy of defense of gambling. Leaders have many times used "states' rights" as their rallying cry. They do so today as they seek to fight off congressional efforts to ban betting on amateur sporting events. The state established rather strong regulatory measures for gambling in response to attacks by the federal government during and following the Kefauver hearings of the early 1950s. The state did invite federal regulation of casino gambling when in 1969 it passed the corporate gaming law. As a result the Security and Exchange Commission has powers over casino gambling. However, this was acceptable as corporations could now invest in the gambling industry. In 1988 the state supported federal regulation of Indian gambling, and in 1992 the state endorsed a federal ban on sports betting in 46 states (but not Nevada). In some cases the state promoted gambling elsewhere, but at other times it does not. In 1998, state interests invested $26 million in a campaign seeking to limit Indian casinos in California, yet many of the same interests are now negotiating with tribes to build their casinos. In all these cases the state was advancing its basic industry. (Thompson, 2001),

While Elazar and others indicated that Nevada has an I culture, the gambling issue is played out in the climate of a T culture. Moreover, in the face of desires of political leaders that seek to protect the essential industry of the state the general population acts much like those in a subject culture. On non-gambling issues, the same population can operate much in the participant mold. Indeed the state will readily elect conservatives or liberals, Democrats or Republicans as would voters of an I state. However, whatever the stripe of the leaders, the leader will always fall into line when called upon to defend the casino industry. (Thompson, 2001).

Nevada had consistently followed the same modus operandi from its mining days through its casino predominance, however California changed. First, California changed from a state dominated by renegade miners, to a state of agriculture and industry. The M culture came be pervasive thorough most of the Twentieth century. The state produced a series of reform governors--both Republicans and Democrats: Hiram Johnson, Earl Warren, Goodwin Knight, Edmund Brown and Jerry Brown. Even conservative Ronald Reagan maintained policies of his predecessors. The state became a leader in education, transportation, and public power production. The state was the national leader in providing services to its people. But the services came at a price--high taxes. (Lutrin and Thompson, 2000).

For most of the century the state played a positive sum game in an M-participant cultural environment. Everyone won with greater services including the taxpayers. Then elements of the population perceived that they were paying too much and not receiving enough. They led a tax revolt
in 1978. They were successful in limiting many taxes by referendum votes. Services were reduced drastically. Almost overnight, the state abandoned the M culture, and adopted a zero sum game more in line with the I culture. Popular majorities were also confronted with new immigrants many of whom were undocumented persons from "south of the border." The majorities now asked if a specific program was helping them personally, while in the past leaders asked how programs could help the entire society. In the past the state population and its leaders resisted almost every effort to establish legalized gambling. But this was a new atmosphere. The moral side of the gambling equation was not significant in the face of promises that gambling revenues could provide services that otherwise would have to be cut. A lottery was endorsed by voters (even in face of the opposition of the governor and attorney general) as a way to support education. State leaders tried to control Native American gambling, but tribes successfully turned to the voters in 1998 and 2000 to win the right to have casinos offering all the games that are offered in Nevada. The casinos were seen as vehicles that could offer jobs to the unemployed, as well as new funds for the state--called contributions because the Native American casinos could not be directly taxed. The state maintains its posture as a participant culture, perhaps even more so than in the pre-1978 days, as the legislature in the face of budget crises willingly forgoes policy making responsibilities and allows power to pass to the people directly through the referendum process. (Lutrin and Thompson, 2000).

In 1994 *Time Magazine* (January 10) ran a feature story on "Las Vegas: All American City." The story examined the renegade past of Las Vegas, but offered that the city was now rather "normal," not because it was becoming like the rest of the nation, but rather because the rest of the nation was becoming like Las Vegas. With the endorsement of wide open casino gambling, albeit on Native American lands, California is indeed becoming more like Nevada.

**A Final Note**

The scholars who enunciated the concept of political culture as a tool for political analysis left much work to be done by others. The works by Elazar and Almond and Verba must be considered seminal, however they provided only the road map, they did not take the journey. Subsequent works dealing with the political culture concept have not definitively established its value as an explanatory tool for public policy analysis in a comparative framework. We have taken a next step. By focusing upon one issue area--gambling legalization--we have used the concept in a cross national and also a sub-national comparative analysis. Our study suggests that the scholars did identify a component for policy analysis. Our work has been qualitative, and as such it is not subject to the rigorous tests of significance must be quantitatively oriented. We do suggest however, that we must have a good grasp of issues and history before yielding to numerical proofs in policy analysis. For a next step, we suggest that others take public policy questions that are common to many diverse jurisdictions--such as the gambling issue is--and weave the concept of political culture into cross jurisdictional analyses. We envision expanding the study we started with a qualitative comparison of two states, and then two nations, to many other national settings in order to reaffirm what we believe we have found to be an efficacious analysis of gambling policy in a comparative framework.
References


Time (1994, January 10).

Strategies for winning on poker machines

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Abstract
Slot machines have become the main form of gambling in the western world. Modern slot machines have a computer base that ensures that the machine payouts conform to legislation. Payouts also conform to the requirement that the player must expect to lose in the long run independently of the strategy used. For some slot machines, payouts are not independent of strategy (draw poker machines) whereas for others payout is strictly independent of strategy. Nevertheless, players do not approach the task with an attitude of hopelessness. Despite the impressive deterrents, players develop strategies for defeating the machines. In this paper, the results of observational studies of poker machine play are presented. The strategies used are documented and provide some interesting tests of psychological theory. Is the modern poker machine player simply another example of a culture of optimism? Discussion focuses on the explanation of the widespread interest in a self-defeating pastime.

Introduction
In many societies, people may choose to gamble legally in a wide variety of ways. Yet increasingly, electronic gaming machines are becoming the major form of gambling. This is certainly true of New South Wales where the taxation revenue from poker machines makes up 12% of the total taxation revenue from all forms of gambling and the density of machines in the community is one of the highest in the world (Walker & Sturevska, 2000). Understanding the attraction of poker machines is a challenge to psychological theory.

Explaining why people play poker machines implies explaining why a person enters a venue containing the machines, explaining why that person begins to play a machine and explaining why he or she continues to play once started. The focus of this paper is on the last factor: explaining perseverance in play.

The modern poker machine provides a two-stage game. In stage 1, the player selects a bet and the machine displays whether the bet was successful and what is the payoff for the successful bet. In stage 2, the player may elect to gamble the payoff from stage 1 as either a 1:1 bet (colour of a
card) or a 3:1 bet (suit of a card). In stage 1, the poker machine offers an array of bets composed of lines and credits per line. In stage 2, the player may elect to guess the colour of a playing card or its suit. Stage 1 bets are structured so that the expected payouts are less than the total bet (an unfair bet for the player). Stage 2 bets are fair bets. A rational player who is playing to maximise the amount won will prefer the stage 2 bet over collecting the winnings and transferring to another machine.

**Theories of poker machine play**

There are three main categories of motivation for playing poker machines:

(a) Poker machines are exciting; they give pleasure and satisfaction. Individuals play in order to experience the pleasure of the game. The pleasure of the game may come from the cognitive work in selecting bets, the sight and sound of the machine in operation, the tension associated with the uncertainty of the outcome, or the relaxation associated with knowing the result;

(b) Poker machines provide the chance of winning money. Individuals play in the hope of winning money or beating the machine. Winning money or beating the machine will typically also provide pleasure, but the primary motivation is the hope of winning rather than the pleasure derived thereby;

(c) Poker machine play is motivated by external circumstances. For example, poker machines might provide an escape from aversive situations in everyday life. Alternatively, poker machine play may be a way of maintaining company. The individual is pushed towards playing the machines by external factors rather than pulled towards playing the machine by intrinsic pleasure or the hope of winning money.

Although presented in pure form here, these motivational explanations are not necessarily mutually exclusive. One motivation may phase into another as when an individual initially plays to win money, but subsequently plays to avoid an aversive relationship with the spouse. Some theories of play explicitly state that two or more factors are involved (Sharpe & Tarrier, 1993).

**Research strategies**

There are three major approaches to finding out by empirical means why individuals play poker machines:

(a) **Self-report.** The investigator asks individuals why they play poker machines. There are two important assumptions behind research of this kind. First of all, it is assumed that the individual actually knows and can report why he or she plays. Secondly, it is assumed that the individual will tell the truth rather than spin a story. Typically, the investigator constructs a questionnaire to find the answers to the research questions. Since the investigator may not know what are the important issues, there is a danger that little of value will result from this approach. A more sophisticated version of the self-report approach involves unstructured interviews with players. The investigator allows the player to determine what are the important issues and to provide information relevant to these. An excellent example of this approach is the work of Lynch (1990). Lynch interviewed 21 players at a large suburban club in Sydney. The players had all won a minimum of six jackpots in one year by playing at the club. Perhaps for this reason, they were especially willing to talk about their experiences. The data revealed that players interpret their gambling as having a wide range of meanings. For some players, gambling is relaxation away from the struggles of everyday life. For other players it is exciting with the prospect of a jackpot possibly occurring in the very next game. Playing poker machines can be a social
phenomenon, for example, as a way for husband and wife to spend time together. Unfortunately, research of this kind is open to the possibility of serious bias: the answers obtained may depend heavily on the way in which the sample is recruited. In the case of Lynch’s study, the participants had all had the good fortune to win six or more jackpots in a year. They were the lucky ones. One can only guess whether the unlucky players, some of whom failed to win even one jackpot in a year, would have exhibited the same vocabularies of hope that Lynch found in his sample.

(b) Observation. The investigator observes the play of the individual and seeks to infer the explanation. Although observation would seem to be a pre-requisite for research, unfortunately the value of observation depends heavily on what it is that is observed. In the typical observational study, the investigator has a hypothesis concerning the data likely to result. This hypothesis may well blinker the investigator so that important phenomena are missed. Walker (1994) tested whether superstitious practices are associated with prolonged play. Dickerson et al. (1992) and later Delfabbro and Winefield (1999) tested whether speed of play depends on the size and frequency of payouts. Unfortunately, observational research of this kind assumes that the important features of the behaviour are understood: in Walker’s research, that poker machine players persevere in playing for irrational reasons; in Dickerson’s research, that poker machine players are under the control of reinforcement schedules. Although the results of such research may be interesting, the questions asked may be premature.

(c) Experiment. The investigator assumes that the explanation of some phenomenon depends on the presence or absence of one or more causative factors. An example is the theory of urges. According researchers in this tradition, frequent poker machine play can be understood as the result of urges. The individual experiences an urge to play which results in the behaviour necessary to reach a machine and begin playing. An urge can be understood as a combination of gambling thoughts and arousal. The arousal may be triggered by the gambling thoughts or by the gambling stimuli such as the sights and sounds of the machines. Winning produces arousal that reinforces play. The difference between problem gamblers and recreational gamblers lies in the strength of the urges. Support for this view of poker machine players comes from research by Sharpe, Tarrier, Schotte & Spence (1995) who found that skin conductance was elevated in problem gamblers by gambling stimuli in the absence of gambling behaviour. Unfortunately, Sharpe et al used problem gamblers seeking treatment as their problem gambling group. Problem gamblers seeking treatment form a special group. Their gambling has generated sufficient problems for them to seek help. Poker machines are very likely to be associated with the problems that have been generated by excessive losses. Thus, the elevated skin conductance observed by Sharpe et al may have had nothing to do with the genesis and development of problem gambling, but only with its consequences. In general, the experiment combines the problems associated with observational studies with another set of problems associated with studying gambling behaviour out of its natural context.
Criticism of current research strategies

Self-report, observation and experiment are each important techniques of investigating a phenomenon that is reasonably well described but not understood in detail. The argument of this paper is that poker machine play is not a phenomenon that is sufficiently well described to admit the research strategies listed above as appropriate and useful. The research exemplified in the previous section all implies a stereotyped view of the poker machine player that may in fact be false. The stereotyped view of the player is of an individual playing a machine for long periods of time. This assumed perseverance may be explained by the continuing excitement and arousal, the random ratio reinforcement schedule, or the hope of the player that a big win will soon be achieved. Although this stereotype may approximate the reality for some players, it fails to include consistencies in play that are readily observed in large numbers of players. Three aspects of modern poker machine play are described in the following section. Each aspect must be confirmed by systematic observation before it can be accepted as characteristic of the majority of players (or of a large minority). However, once the new characteristics are confirmed, they pose difficult questions to current theories of poker machine play and research-based understanding of the motivations of players.

Three phenomena requiring explanation

The research evidence for the following phenomena is relatively weak. Two of the three phenomena are supported by observations of ten or fewer players from clubs and hotels in New South Wales. No conclusions are warranted until these fortuitous observations are confirmed by data gathered within an acceptable research design.

Maximum strategy

Poker machine players, on the whole, do not make haphazard or highly variable choices in repeated plays on a machine. In a study of 266 patrons of the Star City Casino, all of whom were playing Queen of the Nile poker machines, 50% of players used the maxim in strategy five or more times in 20 games (Williamson & Walker, 2000). The maxim in strategy consists of betting on the maximum number of lines with the minimum number of credits per line. Williamson & Walker hypothesised that players used maxim in strategy in order to maximise their perceived chance of winning a high paying feature.

Double or nothing

Phase 2. of a poker machine game offers the player a chance of doubling the current win at the risk of losing that win. Players typically avoid this option despite it being the only even money wager (i.e. fair gamble) offered. Table 1 shows the statistics from one 1c Queen of the Nile machine for one day’s play.
Table 1. Percentage of players who double wins of varying size.

<table>
<thead>
<tr>
<th>Amount of win</th>
<th>% who gamble</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4</td>
<td>40</td>
</tr>
<tr>
<td>5-9</td>
<td>36</td>
</tr>
<tr>
<td>10-19</td>
<td>39</td>
</tr>
<tr>
<td>20-29</td>
<td>36</td>
</tr>
<tr>
<td>30-49</td>
<td>28</td>
</tr>
<tr>
<td>50-99</td>
<td>26</td>
</tr>
<tr>
<td>100-199</td>
<td>28</td>
</tr>
<tr>
<td>200-499</td>
<td>24</td>
</tr>
<tr>
<td>500-999</td>
<td>21</td>
</tr>
<tr>
<td>1000-1999</td>
<td>29</td>
</tr>
<tr>
<td>2000-4999</td>
<td>16</td>
</tr>
<tr>
<td>5000+</td>
<td>10</td>
</tr>
</tbody>
</table>

Note. The data was recorded from a 1c Queen of the Nile data provided by Century Tavern, Sydney.

More dramatic evidence of the avoidance of the double or nothing observation comes from observations made in a variety of hotels on ten players. In each case, the investigator built sufficient rapport with the player to be able to suggest a specific use of the gamble button (double or nothing). The suggestion to gamble was made immediately following the final free game in a Queen of the Nile feature. The investigator said, “That’s a great win. Hit the gamble button and double it!” Not one player out of the ten obeyed the command, nor did any one of those players give the option any serious consideration. Five of the ten players collected their win and moved to another machine.

Finding a hot machine
Caldwell (1974) noted that poker machine players try avoiding machines that are “hungry” and to play machines that are “hot”. Unfortunately, Caldwell’s observations did not initiate the research necessary to understand the searching behaviour of poker machine players. However, in observations of eight players in clubs within New South Wales, the investigator noted that only one of the eight players started and finished the session on the same machine. Seven out of the eight players played more than five machines in the session. In approximately nine hours of play, 112 machines were played. The average amount of time spent playing a machine was five minutes and many players played several machines consecutively for a small number of games on each.

Speculation
Before any conclusions can be drawn, the observations reported in this paper need confirmation. Nevertheless, if it is the case that the vast majority of players play large numbers of machines for short periods of time, have a distinct preference for maximin strategy and prefer not to double small amounts and refuse to double large amounts, what is the explanation? It may well be the case that the dominant motivation for all poker machine players is the hope of winning money. It makes sense to cover all of the paying lines so that no combinations are missed when the feature occurs. It makes sense to not risk the large win that makes possible further large wins. Most of all it makes sense to find the machine that is most likely to pay out big. That none of these sensible options is supported by a rational consideration of the odds, is not important to the player since personal logic and selective experience prove, to the satisfaction of the player, that care, thought and diligence will be rewarded. How behaviourist and arousal theories will make sense of the same phenomena is difficult to imagine.
References


Personal and cultural factors in the etiology of pathological gambling in women in the United States

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Abstract
The purpose of the present study was to explore etiological factors in the development of gambling problems in a sample of 30 women members of Gamblers Anonymous and 60 treatment-seeking women in Phoenix, Arizona. Relevant personal and cultural factors were identified from test, questionnaire, and prevalence data. Pathological Gambling was measured by DSM-IV diagnostic criteria and the South Oaks Gambling Screen; depression was assessed on the Beck Depression Inventory-II; and coping strategies were measured by the Coping Inventory for Stressful Situations. Test results were indicative of significant levels of depression and deficiencies in task-oriented coping strategies. Questionnaire data often suggested life histories characterized by trauma and multiple stressors. Implications for both treatment and prevention of Pathological Gambling in women and directions for future research were discussed.

Introduction
In 1999 the National Gambling Impact Study, which addressed the impact of gambling on residents of the United States, published its findings. The study’s researchers estimated female gamblers comprised one third of the total number of problem and/or pathological gamblers in the United States (Gerstein et al., 1999). Other research findings indicate female versus male pathological gamblers begin gambling at an older age and have a shorter gambling career (Lesieur & Blume, 1993); in addition, females gamble more frequently on machines (Lesieur & Rosenthal, 1993).

While discussing prevalence rates of pathological gambling in both genders, Lesieur notes that, in general, “males tend to have higher rates of pathological gambling than females,” across all age groups. However, he adds that in states with casino gambling or legalized video poker machines, the rates of pathological gambling are similar in males and females (Lesieur, 2001).
Arizona Prevalence Data

In 1981 the state of Arizona in the United States opened the Arizona Lottery. In 1993 the first apparently permanent Indian casino opened in the Phoenix, Arizona area. It was quickly followed by several others with the last and most elaborate casino opening in the year 2000 at a location on the outskirts of the Phoenix metropolitan area adjacent to heavily populated suburbs. Machine gambling is overwhelmingly the primary form of gambling available at the Arizona Indian casinos. Since the mid 1990's Arizona gambling helpline data (D. Hulen, Personal Communication, November 2001) suggests the incidence of gambling problems among both men and women in Arizona is increasing. The easy access to casino gambling created by the opening of Indian casinos near populated areas may well account for the increase.

Data collected by the Texas Council on Problem and Compulsive Gambling, which contracts with the State of Arizona, to respond to telephone calls from Arizona residents with gambling problems, indicate during the period from September 2000 to August 2001, 54.4% of intake calls were from females, while 45.6% were male callers. (M. Shcolnik, Personal Communication, November 2001). Data from The Arizona Council on Compulsive Gambling, which has operated a helpline since 1994, reveals that in 1995, 30% of the helpline callers on whom data was collected were women. By 1998 data indicate 50% of the callers were women, in 1999 52% were women and in 2000 55% were women. In terms of total numbers of women callers to the Arizona Council’s helpline from whom data was collected, the numbers range from 281 female callers in 1998 to 500 female callers in 2000 (D. Hulen, Personal Communication, November 2001).

Moreover, in the fall of 1989, Gamblers Anonymous (GA) in the Phoenix metropolitan area, the most heavily populated area in Arizona, had only one female member and held three weekly GA meetings. Today Phoenix GA has many woman members. As of September 2001, there were 22 weekly GA meetings in the Phoenix area, and two of these meetings were for women only (Richie G., Personal Communication, October 2001). Certainly, the helpline data for Arizona residents collected by both the Texas and Arizona Councils as well as information from GA suggest gambling problems among women in the State of Arizona and the Phoenix metropolitan area are increasing.

In light of the increasing incidence of pathological gambling among women in Arizona, a major concern is the identification of factors that may play a role in the etiology of gambling problems in these women. The present study is an attempt to explore factors that may contribute to the development of gambling problems in a sample of women in the Phoenix, Arizona area of the United States.

Review of the Literature

In a review of the literature on female pathological gamblers, Lesieur (2001) reports that a number of studies suggest women gamble to escape life problems and/or alleviate emotional distress (Lesieur, 1998; Coman, Burrows & Evans, 1997; Sagris, Pierce, & Loughman, 1996; Specker et al., 1996). Findings from several studies indicate women gamblers are likely to have a history of physical and sexual abuse (Wilson, 1998; Kaplan, 1996; Strachan & Custer, 1993). Other studies have focused on genetic characteristics as a possible factor in the development of a gambling problem in both male and female gamblers (Comings et al., 1997; Blum et al., 1996).

In a review of the literature on depression among pathological gamblers (Getty, Watson, & Frisch, 2000) the authors note that some studies (Linden, Pope, and Jonas, 1986; Raviv, 1993; Rugle and Melamed, 1993) found high levels of depression among pathological gamblers while
other research findings are not suggestive of high depression levels among individuals with gambling problems (Dell, Ruzicka, & Palisi, 1981; Roston, 1965). In one study, depression is identified as an antecedent to problem gambling in two thirds of the cases involving women gamblers (Specker et al., 1996).

McCormick (1994) suggests gamblers respond to negative affect and various life stressors by utilizing gambling as a coping mechanism. One study of female GA members in the Phoenix, Arizona area found female gamblers were more likely to use Emotion-oriented versus Task-oriented strategies for coping with problems (Wilson, 1998). In a study comparing depression and styles of coping in males versus female GA members and controls, researchers found “greater depression and reactive coping amongst female subjects” (Getty, Watson, & Frisch, 2000). In another study, of female machine gamblers in Australia (Scannel et al., 2000) researchers found that those women who “predominantly relied on emotion-focused strategies had a lower level of control than women who relied on problem-focused approaches.”

**Method**

**Subjects**

Ninety female participants took part in the present study. Of this number, 30 were members of GA chapters in the Phoenix, Arizona metropolitan area. The GA group was comprised of women who responded to a request in 2000 and 2001 for volunteers to participate in the study. The other 60 participants were women who sought treatment in 2000 and 2001 for a gambling problem at the Arizona Winway Center for Gambling Recovery, a gambling-specific outpatient treatment program in the Phoenix area. All 90 women had gambled in the past year. All subjects met or exceeded DSM-IV diagnostic criteria for Pathological Gambling (American Psychiatric Association, 1994) and all subjects exceeded the South Oaks Gambling Screen (SOGS; Lesieur & Blume, 1987) lifetime cut-off score for pathological gambling.

Tables 1, 2, and 3 contain data regarding various gambling and demographic characteristics of the GA sample, the treatment-seeking sample, and the combined sample. An examination of the gambling preferences of the combined sample (Table 1) suggests the majority of the women were machine gamblers, primarily slot machine players with video poker coming next in preference followed by video keno. There are a few table poker and table black jack players in the combined sample.

**Table 1. Gambling Preferences**

<table>
<thead>
<tr>
<th>Type of Gambling</th>
<th>Percentage of Combined Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slots</td>
<td>61%</td>
</tr>
<tr>
<td>Video Poker</td>
<td>23%</td>
</tr>
<tr>
<td>Table Poker</td>
<td>5%</td>
</tr>
<tr>
<td>Video Keno</td>
<td>5%</td>
</tr>
<tr>
<td>Black Jack</td>
<td>2%</td>
</tr>
<tr>
<td>Internet Gambling</td>
<td>1%</td>
</tr>
</tbody>
</table>
Table 2 addresses not only the current age of the treatment-seeking, GA and combined samples but also the age at first bet, the age when the subject first gambled weekly, and the age when the subject reports she began to gamble compulsively. As the table indicates, the three sample groups are quite similar. Combined sample data suggest the first bet was typically made at age 26. Approximately 17.5 years later at about the age of 44 the women typically began to gamble compulsively, and they had been gambling compulsively for about 6.5 years before going to GA or seeking treatment. An examination of marital status in the three samples (Table 3) reveals most of the women were married or divorced at the time of the study.

Table 2. Age

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean Age</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>First Bet</td>
<td>Gambled</td>
<td>Gambled</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Weekly</td>
<td>Compulsively</td>
</tr>
<tr>
<td>Treatment-seeking</td>
<td>26.8</td>
<td>43.3</td>
<td>43.4</td>
<td>49.9</td>
</tr>
<tr>
<td>Gamblers Anonymous</td>
<td>25.5</td>
<td>44.8</td>
<td>44.6</td>
<td>51.9</td>
</tr>
<tr>
<td>Combined</td>
<td>26.3</td>
<td>43.8</td>
<td>43.9</td>
<td>50.6</td>
</tr>
</tbody>
</table>

Table 3. Marital Status

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Gamblers Anonymous</th>
<th>Treatment-Seeking</th>
<th>Combined Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>17%</td>
<td>12%</td>
<td>13%</td>
</tr>
<tr>
<td>Married</td>
<td>27%</td>
<td>35%</td>
<td>32%</td>
</tr>
<tr>
<td>Separated</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Divorced</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
</tr>
<tr>
<td>Widowed</td>
<td>17%</td>
<td>7%</td>
<td>10%</td>
</tr>
<tr>
<td>Cohabitating</td>
<td>3%</td>
<td>8%</td>
<td>7%</td>
</tr>
</tbody>
</table>

The groups were similar in terms of ethnicity (Table 4). Ethnicity data also indicates the majority of the combined sample participants were white. As the Phoenix, Arizona metropolitan area also has a large Hispanic population, the Hispanic ethnic group is very much under-represented in the present sample.

Table 4. Ethnicity

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Treatment-Seeking</th>
<th>%</th>
<th>Gamblers Anonymous</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>55</td>
<td>91%</td>
<td>28</td>
<td>93%</td>
</tr>
<tr>
<td>Black</td>
<td>1</td>
<td>1%</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Asian-American</td>
<td>1</td>
<td>1%</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Hispanic-American</td>
<td>2</td>
<td>3%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>American Indian</td>
<td>1</td>
<td>1%</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Additional findings include the fact that the household income of the combined sample, most frequently ranged from $25,000 to $50,000. In terms of educational level, the GA sample members typically had a high school education, while the treatment-seeking group typically reported some college education (less than a Bachelors Degree).

Materials

South Oaks Gambling Screen (SOGS). In addition to a checklist of DSM-IV diagnostic criteria (American Psychiatric Association, 1994), all subjects were administered the lifetime South Oaks gambling screen (SOGS; Lesieur & Blume, 1987, 1993). The SOGS is a widely used 20-item self-report instrument based on DSM-III diagnostic criteria for pathological gambling. The validity data indicate that a score of five or more classifies 98% of a sample of GA members. Reliability data indicate that the lifetime SOGS meets criteria as a highly reliable instrument for the screening of pathological gambling (Lesieur & Blume, 1987).

Beck Depression Inventory-II (BDI-II): The treatment-seeking sample only was administered a measure of depression, the Beck Depression Inventory-II (BDI-II). This self-report inventory contains 21 items utilized for the assessment of depression. The following scores are recommended as cutoffs for various levels of depression: 0-10 suggests minimal or no depression; 10-18 is indicative of mild to moderate depression; 19-29 suggests moderate to severe depression; and scores above 30 are indicative of severe depression. Research on the BDI-II indicates it has satisfactory reliability and validity (Beck, Steer, & Brown, 1996).

Coping Inventory for Stressful Situations (CISS). Coping strategies were measured by administering to all subjects the Coping Inventory for Stressful Situations-Adult version (Endler, & Parker, 1990). The CISS is a 48-item inventory in which respondents are asked to rate each item on a five-point frequency scale. The inventory measures three types of coping strategies: Task-oriented, Emotion-oriented and Avoidance-oriented coping. Task-oriented coping involves direct problem-solving strategies; Emotion-oriented coping includes strategies such as “emotional responses, self preoccupation, and fantasizing reactions,” and Avoidance-oriented coping can be divided into two subscales; Distraction and Social Diversion. Distraction involves escaping a stressful situation by engaging in alternative activities, while Social Diversion strategies serve to avoid the stressful situation by seeking interactions with others. Validity studies utilizing other psychometric instruments suggest that Emotion-oriented coping and Distraction are positively correlated with measures of psychopathology. At the same time, Task-oriented coping and the Social Diversion subscale of Avoidance coping have been found to be negatively correlated to depression and other aspects of psychopathology. Data presented in the manual and reviewed by the authors indicates the CISS is an inventory with both good internal consistency and test-retest reliability as well as solid construct validity (Endler & Parker, 1990).

Questionnaires. A variety of information related to both personal history and problems as well as gambling history and problems was elicited from responses to several questionnaires. Questionnaires utilized include the Gamblers Self-Report Inventory (GSRI; Lesieur & Rosenthal, 1995) modified slightly (Wilson, 1998), as well as two other brief questionnaires designed for the study.
Procedure

GA members were contacted by telephone and asked to volunteer for the study. GA participants came to the office of the treatment center on one occasion where they were administered the tests and questionnaires. After obtaining informed consent from the GA volunteer participants, each participant was administered the DSM-IV checklist and given a package containing the SOGS, CISS, and the Questionnaires, which were completed in the office of the treatment center. The treatment-seeking group of female gamblers were administered the DSM-IV checklist, SOGS, CISS, BDI-II and questionnaires as part of the assessment process involved in treatment planning at the gambling-specific outpatient program.

Results

Test Results

All of the GA members who volunteered to participate as well as all of the treatment-seeking gamblers met or exceeded DSM-IV diagnostic criteria, and all subjects exceeded the lifetime SOGS cut off score for pathological gambling. Mean scores for the lifetime SOGS as well as the BDI-II mean scores are reported in Table 5. The lifetime SOGS mean score for the combined sample is 13.15 which is well above the score of 5, which is reportedly the minimum cut off score required to indicate pathological gambling (Lesieur & Blume, 1987). The treatment-seeking group obtained a mean BDI-II score of 26.73, which is indicative of a moderate to severe level of depression (Beck, Steer & Brown, 1996).

Table 5. Lifetime SOGS/BDI-II

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BDI-II</td>
</tr>
<tr>
<td>Gamblers Anonymous</td>
<td>-</td>
</tr>
<tr>
<td>Treatment-Seeking</td>
<td>26.73</td>
</tr>
<tr>
<td>Combined Sample</td>
<td>-</td>
</tr>
</tbody>
</table>

An examination of the mean CISS scores (Table 6) for each sample indicates the scores of the GA and treatment-seeking groups are similar. Mean scores of the CISS normative samples are found in the manual (Endler & Parker, 1990). The mean scores of the current sample were compared to the mean scores of the normative adult female sample. A focus on the mean scores of the present combined sample reveals all scores except one fall within one standard deviation of the mean of the normative sample of female adults. The combined sample mean score on Task-oriented coping falls more than one standard deviation below the mean of the normative female sample.

Table 6. CISS

<table>
<thead>
<tr>
<th>Coping Strategy</th>
<th>Gamblers Anonymous</th>
<th>Treatment-Seeking</th>
<th>Combined Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>51.97</td>
<td>48.43</td>
<td>49.68</td>
</tr>
<tr>
<td>Emotion</td>
<td>51.79</td>
<td>51.70</td>
<td>51.73</td>
</tr>
<tr>
<td>Avoidance</td>
<td>44.69</td>
<td>43.38</td>
<td>43.84</td>
</tr>
<tr>
<td>Distraction</td>
<td>22.45</td>
<td>21.23</td>
<td>21.66</td>
</tr>
<tr>
<td>Social Diversion</td>
<td>14.86</td>
<td>13.30</td>
<td>13.85</td>
</tr>
</tbody>
</table>
On one questionnaire respondents were asked, “Were you abused or neglected as a child?” The respondents were then asked to check whether or not they had been physically abused, emotionally abused, sexually abused, physically neglected, or emotionally neglected. The words “abuse” and “neglect” was not defined in the question. Tables 7 and 8 reflect the responses to this question. Noteworthy is the fact that 42.7% of the combined sample reported a history of emotional neglect. Almost 44% of the combined sample indicated they were emotionally abused while 28% reported they had been sexually abused. Interestingly, when data regarding sexual abuse in the present sample was reported on a different questionnaire (the GSRI) in which the respondent was asked to reply “yes” or “no” to a question regarding whether or not she had been sexually abused, the frequency of sexual abuse in the combined sample rose to 59%. This discrepancy in the frequency in reported sexual abuse may well be explained by varying methodologies required for answering the questions about sexual abuse on two different questionnaires. In the first questionnaire the respondent was asked to check what type of abuse or neglect she had suffered, while on the GSRI, respondents are given a forced choice option and were required to answer “yes” or “no” with regard to whether or not they had been sexually abused.

Table 7. Neglect History

<table>
<thead>
<tr>
<th>Group</th>
<th>Physical</th>
<th>Emotional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gamblers Anonymous</td>
<td>13.3%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Treatment-Seeking</td>
<td>5.6%</td>
<td>37.0%</td>
</tr>
<tr>
<td>Combined Sample</td>
<td>8.5%</td>
<td>42.7%</td>
</tr>
</tbody>
</table>

Table 8. Abuse History

<table>
<thead>
<tr>
<th>Group</th>
<th>Physical</th>
<th>Emotional</th>
<th>Sexual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gamblers Anonymous</td>
<td>13.3%</td>
<td>53.3%</td>
<td>33.3%</td>
</tr>
<tr>
<td>Treatment-Seeking</td>
<td>18.5%</td>
<td>37.0%</td>
<td>24.0%</td>
</tr>
<tr>
<td>Combined Sample</td>
<td>17.1%</td>
<td>43.9%</td>
<td>28.0%</td>
</tr>
</tbody>
</table>

The participants were also asked about their parents’ problems (Table 9). 45% of the combined sample reported they had an alcoholic father while 18% stated they had a father with a gambling problem. Mothers were most frequently reported to have problems with compulsive eating or compulsive gambling followed in frequency by problems with alcohol. These findings related to addictive issues in parents could suggest either the influence of parental modeling of addictive behaviors or the possibility of a genetic predisposition to addiction in some members of the present sample. Also noteworthy is the fact that 11% of the combined sample reportedly had a mentally ill mother.

The subjects in the combined sample of pathological gamblers responded to questions regarding which problems in addition to gambling they had experienced either presently or in the past (Table 10). Compulsive spending followed by workaholism were the most frequently listed co-occurring problems. Interestingly, only slightly more than 15% of the combined sample reported current and/or past alcohol problems while only 9% checked drug problems. These findings
contrast dramatically with data from samples made up primarily of male gamblers where literature reviewers estimated 50% of the gamblers had an alcohol or drug abuse problem at some point during their lifetime (Rosenthal & Lorenz, 1992).

Table 9. Problems of Parents of Gamblers

<table>
<thead>
<tr>
<th>Behavior/Problem</th>
<th>Percentage of Combined Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mother</td>
</tr>
<tr>
<td>Gambling</td>
<td>8.5</td>
</tr>
<tr>
<td>Alcohol</td>
<td>13.4</td>
</tr>
<tr>
<td>Drug</td>
<td>7.3</td>
</tr>
<tr>
<td>Workaholism</td>
<td>9.7</td>
</tr>
<tr>
<td>Compulsive Eating</td>
<td>15.9</td>
</tr>
<tr>
<td>Compulsive Spending</td>
<td>15.9</td>
</tr>
<tr>
<td>Mental Illness</td>
<td>10.9</td>
</tr>
</tbody>
</table>

Table 10. Other Problems of Women Gamblers

<table>
<thead>
<tr>
<th>Behavior/Problem</th>
<th>Percentage of Combined Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compulsive Spending</td>
<td>43.0%</td>
</tr>
<tr>
<td>Workaholism</td>
<td>37.8%</td>
</tr>
<tr>
<td>Compulsive Eating</td>
<td>20.0%</td>
</tr>
<tr>
<td>Addicted to Relationship or Person</td>
<td>18.9%</td>
</tr>
<tr>
<td>Alcohol</td>
<td>15.6%</td>
</tr>
<tr>
<td>Drug</td>
<td>8.9%</td>
</tr>
<tr>
<td>Compulsive Sex</td>
<td>7.8%</td>
</tr>
<tr>
<td>Anorexia</td>
<td>6.7%</td>
</tr>
<tr>
<td>Bulimia</td>
<td>4.4%</td>
</tr>
</tbody>
</table>

Finally, subjects were asked to check which stressors of a list of several stressors (Table 11) they had experienced in the two years leading up to the development of a gambling problem. The most frequently reported stressor in the combined sample was a relationship problem with 60% of the subjects reporting this type of stressor. 49% reported financial losses or worries prior to the development of a gambling problem, and 36% had experienced the death of a loved one during the two years before the onset of a gambling problem. In an examination of the number of stressors per subject in the combined sample (Table 12), only 12% of the respondents reported one stressor from the list in the two years prior to the development of a gambling problem, while 20% had four stressors.

The presence of multiple stressors in the self-report data may explain the fact that the largest number of subjects (57%) in the combined sample reported their most important reason for
gambling was to “cope with relationships and life” (Table 13). This reason was followed by “excitement” and “money” as primary motivations for gambling.

### Table 11. Major Stressors in Two Years Prior to Gambling Problem

<table>
<thead>
<tr>
<th>Stressor</th>
<th>Percentage of Combined Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship Problem</td>
<td>60%</td>
</tr>
<tr>
<td>Financial Losses or Worries</td>
<td>49%</td>
</tr>
<tr>
<td>Move from one Location to Another</td>
<td>44%</td>
</tr>
<tr>
<td>Death of a Loved One</td>
<td>36%</td>
</tr>
<tr>
<td>Work Problem</td>
<td>34%</td>
</tr>
<tr>
<td>Health Problem</td>
<td>32%</td>
</tr>
<tr>
<td>Became a Caretaker for Relative</td>
<td>27%</td>
</tr>
<tr>
<td>Divorce</td>
<td>18%</td>
</tr>
<tr>
<td>Other</td>
<td>13%</td>
</tr>
<tr>
<td>Victim of a Crime</td>
<td>5%</td>
</tr>
</tbody>
</table>

### Table 12. Number of Stressors in Two Years Prior to Gambling Problem

<table>
<thead>
<tr>
<th>Number of Stressors</th>
<th>Percentage of Combined Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12%</td>
</tr>
<tr>
<td>2</td>
<td>23%</td>
</tr>
<tr>
<td>3</td>
<td>21%</td>
</tr>
<tr>
<td>4</td>
<td>20%</td>
</tr>
<tr>
<td>5</td>
<td>14%</td>
</tr>
<tr>
<td>6</td>
<td>1%</td>
</tr>
<tr>
<td>7</td>
<td>6%</td>
</tr>
</tbody>
</table>

### Table 13. Most Important Reason for Gambling

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage of Combined Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Cope</td>
<td>57%</td>
</tr>
<tr>
<td>Excitement</td>
<td>22%</td>
</tr>
<tr>
<td>Money</td>
<td>15%</td>
</tr>
<tr>
<td>Feel Like a Big Shot</td>
<td>-</td>
</tr>
<tr>
<td>Be Less Shy/More Social</td>
<td>-</td>
</tr>
<tr>
<td>Feel More Powerful</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
</tr>
</tbody>
</table>
Discussion

As noted earlier the present sample suffers from a limitation with regard to ethnic representativeness as etiological factors were explored in a predominantly white sample of women gamblers in the Phoenix, Arizona area of the United States. Results cannot be generalized to other racial or ethnic groups and may not apply to women gamblers in other geographical areas. At the same time, a number of findings are supportive of earlier research data, some findings raise questions about past data, and others suggest possible avenues for future research on women gamblers. In addition, some findings from the present study have implications for treatment and possibly for prevention of gambling problems in women.

The finding of moderate to severe levels of depression in the treatment-seeking sample of female gamblers supports findings from earlier studies which report depression among individuals with gambling problems (Linden, Pope, & Jonas, 1986; Raviv, 1993; Rugle & Melamed, 1993). However, since the BDI-II utilized to measure depression in those who had recently gambled in the present study is a state rather than a trait measure, the depression levels found in the subjects are at least as likely to reflect the consequences of a gambling problem as they are to reflect a prior emotional state. Longitudinal studies utilizing measurement instruments, which can determine the presence of depression prior to the onset of a gambling problem and the utilization of measurement instruments which are capable of assessing chronic depression are needed to determine which comes first – the depression or the gambling. In cases where female pathological gambling clients are struggling with depression, cognitive restructuring therapeutic techniques and, at times, medication for depression can be important components of treatment.

With regard to the measurement of coping, the results of this study support earlier findings (Wilson, 1998; Getty, Watson & Frisch, 2000) that women with gambling problems may be deficient in Task-oriented or problem solving coping strategies. For this reason, effective treatment often may need to include training in emotional regulation and problem solving skills.

An important question related to the coping orientation utilized by the women in the study is: have these women always been deficient in the use of Task-oriented strategies or has their ability to utilize Task-oriented strategies been overwhelmed by multiple stressors, the nature of which may not lend themselves to Task-oriented solutions? For example, the emotions resulting from the multiple deaths of loved ones following in close succession, especially if some of these losses included complicated bereavement, may not adequately be dealt with in traditional cognitive behavioral and problem-solving approaches to coping. In these cases, techniques which involve the gradual working through of emotions may be most effective in treatment.

Questionnaire data in the present study suggest this sample of women gamblers were subjected to multiple stressors and, in some cases, trauma in both childhood and adulthood. Also, they often appeared to experience a significant number of major stressors in the two years prior to the onset of a gambling problem. A number of subjects endorsed items suggestive of histories of abuse and neglect. Self-report data indicated most of the women in the sample reported gambling to “cope with relationships and life.” In addition, treatment professionals who counsel women gamblers are well aware of the frequency with which women gamblers suggest they are gambling primarily to escape problems. However, before the conclusion can be drawn that women pathological gamblers are subjected to more frequent and more serious stressors than women non-gamblers, studies utilizing control groups are needed to determine if the personal histories of gamblers differ significantly from the histories of comparable controls. Also, in-depth study of the nature
and severity of stressors experienced by women gamblers prior to the onset of gambling may shed light on etiological factors. Certainly, data from this study regarding multiple stressors and trauma in the histories of women gamblers suggest the need to assess these clients for the presence of Post-Traumatic Stress Disorder and, where necessary, provide appropriate treatment. In addition, prevention programs may increase their effectiveness by issuing warnings to women about vulnerability factors that could increase the likelihood of becoming a pathological gambler.

Because the mean current age (approximately 50 years) of the sample falls within the range typically associated with declining estrogen levels in women, age may be another etiological factor. Medical researchers have noted “a strong link between estrogen and emotional disturbances in humans,” (Wojciech et al., 2001). Biological studies are needed to study the possibility of a relationship between estrogen deficiency and the development of gambling problems in women.

Certainly, the condoning of gambling by the State and the increased opportunities to gamble brought about by the opening of local Indian casinos in the Phoenix area represent a major cultural factor in the increased frequency of pathological gambling in this sample of women. All but one of the women were casino gamblers, and the timing of the onset of their gambling problems typically followed the opening of the Indian casinos. In a meta-analysis related to the prevalence of disordered gambling, researchers (Shaffer, Hall, & Vander Bilt, 1997) cited social acceptence and accessibility of gambling as primary factors in increasing prevalence rates.

In summary, the present study of 90 women gamblers identified a number of personal factors that may have contributed to the development of a gambling problem in this sample. These personal risk factors include significant levels of depression, deficiencies in Task-oriented coping strategies, the possibility of depleted estrogen levels suggested by the age of the subjects, and histories characterized by trauma and multiple stressors.

Moreover, prevalence data suggest the arrival of Indian casinos in Arizona coincided with reports of frequent calls from women to gambling help lines. In fact, findings from this study indicate the development of a gambling problem in growing numbers of women in the Phoenix, Arizona area is probably the result of a marriage between personal vulnerability and the increased availability of local casino gambling. Hopefully, the results of the present study can be incorporated into the design and implementation of effective gambling treatment and prevention programs for women. In addition, more research is needed utilizing culturally diverse samples and control groups to further explore the risk factors for pathological gambling in women and to differentiate causal issues from the effects of gambling.
References


Asian problem gambling - a western Chinese perspective

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Abstract

European counsellors who work with Asian clients have an opportunity to work a little differently than they might with clients of other ethnic groups. Counselling training encourages the counsellor to be non-judgmental and empathic. Counselling techniques invite the client to express feelings, including vulnerability or despair. In contrast, Asian people are generally uncomfortable to show such feelings in front of others. To do so one risks “losing face”. For Asian people counselling is therefore often “the last resort”. He or she is likely to have made numerous attempts to solve the problem already. Shame and a lack of understanding about counselling has probably inhibited earlier help seeking. Counselling also works from a model based on autonomy, individual freedom and individual responsibility. Asian culture, however, values loyalty to family and community. Western counsellors typically find Asian clients more resistant to self-care than their Western clients. Loyalty and generosity to others, at the expense of oneself is often seen as self-sacrificing behaviour by Western counsellors. This paper gives a glimpse into the counselling room of a New Zealand born, Chinese psychotherapist and her work with two Asian clients with gambling problems. In the room are feelings of shame, loneliness and anger. Some of these feelings do not just belong to the client.

Introduction

Some of the Asian clients who come to the door of the Foundation identify Mandarin, Cantonese or Korean as their first language. These clients can be seen by one of our Asian Social Services counsellors. I am referred some of the Asian clients who are more comfortable speaking English or who speak some English and are unable to speak the languages offered by Asian Social Services.

Typical barriers which may inhibit the Asian client from seeking counselling and common presenting issues will be highlighted in this paper. These include shame, resentment and anger,
racism, themes of belonging and not belonging, loneliness and the art of balancing self care while having loyalty to others. These themes can be found in my following discussion of two Asian clients I have seen recently. These clients have generously and kindly given consent for their sessions to be presented. I have changed their names to some of their details to protect their anonymity.

**Barriers to Asian People Seeking Counselling**

Traditionally Asian clients are reluctant to attend counselling. Often counselling is sought only as a last resort. The client has unsuccessfully attempted to cope alone and/or has exhausted family resources. Shame is a contributing factor to seeking help, as well as views that problem gamblers lack self-discipline. Most problem gamblers, regardless of ethnicity, admit a degree of shame about their problem gambling, however for Asian people the degree of shaming is likely to be intense. In Asian culture shame is traditionally used as form of discipline, for example in child rearing and to encourage adherence to the law. China, for example, has a history filled with stories of publicly shamed and physically tortured heroes who have paid for their political and/or religious beliefs.

Shame will also be heightened by beliefs that if one seeks counselling they are admitting they and the family do not have adequate resources to solve the problems from within. Therefore, family name, not just the individual, is shamed by the help seeking. Consequently confidentiality is particularly important for the Asian client. New Zealand Asian communities can be relatively small and the client may be protective of a business and/or family reputation.

Once the Asian client arrives, how can counsellor assist the client? Counselling traditionally places emphasis on the expression of feeling whereas Asian people are concerned with “saving face”. This means vulnerability or anger are frequently minimised to hide a “weakness” of character.

Linked to this perception of weakness is the ideal that hardship should be “endured” and “endurance” is an admirable quality. These values are passed down via stories of parents, grandparents, ancestors and heroes surviving in the face of poverty, starvation, and persecution. Stories of endurance provide inspiration and hope to those who feel despair or wish to express dissatisfaction. However they can also minimise current experiences of pain or powerlessness. Linked to this is the concept of karma. The hardship experienced now has connections to previous actions – ours, our ancestors or actions of past lives.

Counselling also encourages the client to be autonomous, whereas Asian cultures value collectivism and loyalty to family. The Asian client is also likely to have an expectation that the counsellor will be directive or authoritarian and often this is not the case.

The degree to which an Asian client will feel uncomfortable with western styles of counselling will vary, depending on the length of time the client has been away from their country of origin and to what degree the client has integrated or assimilated into the new culture.

**Finding a Place to Stand**

I have been asked how psychotherapy can help an Asian client. Notwithstanding the challenges mentioned, how does the Asian client respond to the therapist putting emphasis onto the relationship between the counsellor and the client? Where does transference and counter-transference fit in?

In response, I continually find myself needing to reflect upon my own culture and my connections
and grief issues around being Chinese. How do my experiences of belonging and not belonging, of finding what Maori term, “turangawaewae”, a place to stand where you feel that you have the authority to say you belong, impact upon my work? What shame or pride do I have in being a New Zealand born Chinese woman? Of being in a defacto relationship with a gwai-law, a European man? What grief or shame or pride do I have of being unable to speak Chinese yet having daughter who can speak Mandarin and English? What family messages do I carry from my Chinese parents?

**Examples of Client Work**

The first client, I will give the pseudonym, Ben. Ben uses gambling to avoid feelings of anger and frustration arising from conflict within the relationship. He originally began gambling in response to feeling panicky and fearful of his family’s disappointment towards him if he did not send money home. In this session Ben recalls the feeling on a time when he did win, and for once felt like “a king”, equal to others including Europeans who look down on him.

Ben1: Depends, that day what you go to gambling for what? Because you fighting with your partner or you want to go, you want to enjoy your life, different.

Therapist1: You want to not feel angry with your partner and feel different?

Ben2: Yeah…

Therapist2: And when you gamble you feel?

Ben3: Mmm, half of my mind is saying am doing right or not, but another half of my mind say yes you do good, you happy you can, you know in the slot machine place, they got many people there. If you win everyone look at you and jealous. You feel like a king…yeah… You feel proud, you know, and if you see someone lost or you know, run out of money, then you just into that machine to think you going to win, buts its not. That time that machine going to, my machine is very hungry want to eat more, you know.

Therapist3: There hasn’t been many times in your life you’ve felt like a king?

Here I am inviting Ben to express sadness he may feel and recall the past. Ben comes from a family where he was beaten from childhood. His mother and older siblings blamed him because his conception co-incided with Ben’s father leaving Ben’s mother. Ben has, in sessions previous to this, described childhood memories of being hungry and beating beaten. He worked from age seven delivering water and paper bags to street vendors.

Ben4: No, never, yes. Yeah that’s, why, I think that’s another part of the problem too because most of the gambling people they got really, really hard life, you know, I’m sure but maybe different money problem. Somebody got a lot of money, but they got another problem, like, you know, family or partner whatever, you know. But these people always have problem, you know, like normal people they want come in for a place like that. Somebody can come in, happy, enjoy or with friends, whatever, but they the limit, know how much they going to do or how many times a month they are going to do. These people lucky. I can say these people, oh if I lost $20 then I lost, if I win that’s enough. Go home. That’s good. See somebody there too. Somebody like that there too, that you know not enough we want more than that. Yeah. Somebody go with $20, they win $100 stop and go but for me I go, no, no, no. Double what they got. But it doesn’t work, you know, after they take a little bit then take again.
Ben uses “other people” and “other gamblers” as a way to distance himself from his own painful feelings, and in this way, attempts to save face. His “wordiness” helps him to avoid his feelings and continue intellectualizing.

Therapist4: I don’t know if you are feeling sad, but I still feel sad that there hasn’t been many times that you’ve felt like a king?

Ben5: Yeah, its sad but we can’t show, we can’t tell the people how sad you are. You don’t want the people to look down on you. You always…

Therapist 5: You don’t want their pity…

I invite Ben to express his sadness by inviting him to share his past and express his sadness around rarely feeling like a “king” or valued. I am also aware that Ben may be hinting that he does not want my pity. Too much mirroring may overwhelm him and lead to him losing face by showing strong feelings. With a European client I might be more likely to make this link, but here I am more cautious about shaming Ben.

Ben6: Yeah, you them to see to I got money, I can come here anytime they see you again, these people all regular customers, you know they always, “Oh, hello, you here again.” You feel, oh, this your friends, this your world, you know. These people understand each other, why we come here what you doing here, you know. But when you walk out, no friendly, no good, the people always look down on you…the people outside look down on you…

Therapist6: Maybe people in New Zealand who look down on Asian people…

Ben7: Yeah, yeah and that’s another problem.

Therapist7: And that hurts. But when you are in the casino you feel like an equal or a king, especially if you win.

Upon reflection I wonder if racism is more my agenda. Ben is telling me it is another problem, not the one that is foreground for him.

Ben8: Because, because you know I am Asian but I can doing what European doing. I can do the same, I can stand, I can sit here, I can enjoy, and you know, but when you walk on the street, the people always look down on us, you know like Asian.

Therapist8: And that’s not fair, to look down on us, because of being Asian

Ben9: I don’t know why…

Therapist9: I’m wondering if sometimes you feel angry about that?

My interventions here are influenced by my own anger and hurt from experiences of racism. I have a strong urge to join with the client on this experience. Perhaps this relates to my own lost connections to being Chinese.

Ben10: Yeah, I am not angry about the way they look at me but I am angry why I have to be like me, why I not be something else, I want to be European or rich family or whatever, you know.
Why I was born in poor family, am Asian, why I have to come to another country to make my life feel, my life better. Why you not happy in your country, why you not carry on, why your country not look after you perfectly, then you don’t have to move to come to another country, you know.

Therapist10: Who were you asking why to?

Ben11: I don’t know… I just ask to myself. Most of the time I ask my family, like grandpa, what the story? Are any of us rich, but the answer is no, no one at all. I am the first person in my family to have the house. You know I got quite a big family but nobody has house at all. Only an aunty married with a guy who got a house. But not buy a house under your name, nobody at all, only me.

Therapist11: Let’s pretend, you know the word pretend,

Ben12: Yep.

Therapist12: Let’s pretend that you ask this family, why was I born into a poor family, why was I born Asian. Lets pretend you ask that question, and lets pretend that you ask the question to yourself and you have the answer, what might the answer be?

Ben13: Only one thing is, that is my karma, you know. I got really bad karma. Because I think, everyone before you born again this world. I think you were born again last time and you done really, really bad things. And about your financial problems, you know maybe you steal money or make someone else you know like, stealing money working like from some company or bank, some people, steal money from a bank, or working, corruption you know that’s why I always think, that’s why this life, we never have lucky.

In this session Ben described how he wanted to wash clean his karma by doing good deeds for others. Karma for him does not just relate to consequences in his present lifetime. Consequences span generations and include past and future lifetimes. Ben hopes that in his next lifetime he will be a cat. He would like to doze lazily in the sun in a garden, well fed and content.

Since this session we have explored the self-sacrifices he makes for others. For example, sometimes Ben misses meals, because he is too busy. He sleeps poorly, lying awake at night worrying about the tasks he has planned for the next day. He does a lot of volunteer work for a Buddhist group and teaches chanting. Often this is at the expense of leisure time and rest for himself. Sometimes Ben feels resentful when people request his help yet he feels unable say no. For most of his life Ben has controlled by others. He hasn’t been taught to have needs or say no. His doing things for others has been accepted and he has been affirmed for this.

To many European or Western counsellors Ben might be viewed as self-sacrificing, a martyr or co-dependent. However from an Asian point of view, the collective well-being is priority. The challenge is to find ways to balance generosity, loyalty and respect for others with self-care. This dilemma is very common with many problem gambling clients. I especially find myself working in this area with not just Asian, Maori and Pacific Island women. “Gambling is a way I give to myself,” they say. “I give, give, give to others. There is hardly time for me. The only way I can get time out is at the pokies. No one asks anything of me there.”

The second client I present is a client I have called Rose. Rose is in her mid twenties, married to a European man who has two children from previous relationships. When the children visit Rose finds them untidy, loud and rude. Some of the children’s comments are linked to comments their
mother makes about Rose. In her family of origin Rose is the oldest cousin on both sides of her parents, and is used to a high degree of respect from cousins younger that her.

For Rose gambling helps to pass time and “escape”. This is important because she is isolated and often feels hurt and frustrated when her husband appears to define his children’s behaviour. The casino is also a meeting place for other women from her ethnic group.

Rose and I have a sisterly relationship. Like Rose I have a European partner who has two children from two previous relationships. I have chosen this piece because it highlights the loneliness often experienced by migrant people.

Rose14: I don’t know. I don’t know. I can control myself, anytime, only I can sometime when I feel so horrible, like, its not mean I feel horrible because I want to gamble. I feel upset or horrible and something comes I don’t like it.

Therapist14: You’re upset when something happens you don’t like.

Rose15: And hard to find friends, talk about it.

Therapist15: When you feel like you have to deal with it on your own…there is no one to talk with, or share.

Rose16: Yeah.

Therapist16: When it feels too much.

Rose17: Yeah. And sometimes I go to the movie but what I feel alone because I doing myself.

Therapist17: Hmm and you feel lonely gambling too?

Rose18: Yes, especial, sometimes you play the machine and your head still keep thinking what what’s wrong and sometimes just, my eyes is watering

Therapist18: Sometimes when you play you cry too…

Rose (crying) 19: Yeah, but no one they can understand.

Therapist19: Hmm… (Phone rings) I’m with a client

Rose20: And because I love people around me, just sometimes I going there just watching, talking, having a coffee or something. But because, because he know I doing my gamble, even time I go there I gamble…

**Conclusion**

Shame around seeking help and exposing vulnerabilities and perceived weakness inhibit the Asian person from seek counselling. Only when rapport and trust have been developed may the client to share, however the counsellor needs to be aware of “saving face” for the client and ways the client may try and “save face” for the counsellor. In the face of hardship and tough terrain, counsellors can follow the example set by the Asian client, that is to endure, to stay with, and not give up. This journey is made more comfortable once we are comfortable with where we stand and have a sense of belonging.
The art of speculation: rationality, imagination and emotion in the experience of ‘serious punting’

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Abstract
Punting on the horses can be simultaneously a ‘serious business’ and a ‘labour of love’. This paper reports the experiences of one ‘serious punter’, drawn from a series of semi-structured qualitative interviews. The first part describes the ‘system’ developed by the gambler and its meaningfulness. The second part broadens the analysis of ‘serious punting’, describing how the rationally constructed and deployed ‘system’ comes into conflict with other forms of knowledge. A strongly cognitivist approach to gambling would argue that this conflict is ‘irrational’. However, this paper argues supposedly ‘irrational’ faculties such as imagination and emotion are an integral part of punting logics. The third part argues that the forms of knowledge and modalities of action constructing the experience of serious punting are better understood as speculation - a complex epistemological category incorporating the desire to ‘know where we stand’ in relation to the future in the furthering of our interests.

Introduction
This paper is a condensed version of based on case studies with a small number of Sydney gamblers. In this instance the research participant is a 44-year-old Australian-born male who is a long-term devotee of betting on horse racing, but only on gallops. At the commencement of the research Stephen had a permanent part-time position as a telephone customer service operator, working shifts of eight hours three times per week. He estimated he spent somewhere between seven and fifteen hours per week on his punting endeavours, although he said that some weeks he might spend up to thirty hours.

In recent times Stephen has been able to leave his job, following the opportunity arising to take up a voluntary redundancy. He has been able to support himself financially since through an intensified punting effort, and through the occasional sale of one of his paintings – his other
passion. A competent musician who still performs occasionally in local hotels, Stephen is not a particularly conventional individual although he would probably consider that he is relatively conventional now when compared to other periods in his life. The research is ongoing so for obvious reasons Stephen is not his real name.

A Serious Punter

Stephen described himself as a “serious punter”. He defined this in terms of his own experience as involving both “a knowledge and love of horse racing culture” and “the necessity to win overall as part of making a living”. These two broad experiential components of being a serious punter describe what are, in practice, two distinct terrains of social action in which Stephen is involved. The significance of these two terrains will be briefly discussed.

The first terrain, which Stephen describes as horse racing culture, is where Stephen feels he is “part of the racing scene”. Stephen attended the Randwick bookmakers on several occasions, on race days and non-race days. On these days Stephen moved about the ring talking and discussing races, horses and the ever-present conspiracy theories that comprise much of what Stephen described as the “myth and intrigue of the track”. He was clearly at-home at the track, a manifestation of a particular mode of his belonging to the social.

In the terminology of Pierre Bourdieu (1990) Stephen embodies the practical habitus of the seasoned race-goer and punter. He has a sense for how to ‘play the game’, that is he speaks and comports himself as a natural amongst the bookies, the track watchers and punters. He feels at home at this particular track in this specific social milieu and effortlessly navigates its complex interpersonal relationships. As a Randwick track and race-day regular Stephen embodies the ‘natural attitude ‘ of a sub-group of the race going population that constructs itself as ‘insiders’ to this specific racing culture.

The social and cultural capitals that Stephen embodies can also be interpreted more generally than the horizon of the Randwick bookies ring or the Sydney metropolitan racing culture. Stephen’s construction of his social experience can be considered in relation to what Gerda Reith (2001) calls homo aleator or man the gambler. According to Reith contemporary homo aleator is that individual who constructs their social experience as always-already implicated in the vagaries of chance. As Livingstone (2001:55) contends, “we know the world in large part within the logic of chance”. Ian Hacking (1990) has similarly described the construction of categories of thought (for example risk) that have operated to “tame” chance, to make it calculable, manageable and hence understandable and non-threatening. Indeed, the notion of ‘taming chance’ may be considered an apt description of the operation of betting systems generally.

From a sociological point of view, chance and contingency are argued to have become a generalised quality or property of social experience. According to Zygmunt Bauman (1999, 2001) the contemporary domination of capricious logics of markets condition us to a generalised social experience of unsicherheit, a German word that roughly condenses the meanings of the English terms insecurity, uncertainty and unsafety. It will be argued that a generalised experience of unsicherheit and the aleatory dimension of human experience provide the conditions of possibility of a flourishing of social action that directly engages with logics of chance and luck.

In Australia, contemporary commercialised gambling is a recognisable and accessible means of engaging with this logic. Indeed, terms such as “fate” and “destiny” occur frequently in Stephen’s discourse, and are understood as constitutive of his ongoing gambling activities and of his life in general. Engaging with this logic of chance represents a second terrain of action that is part of his...
ongoing construction of his social experience of being a ‘serious punter’. In this regard, this paper will extend the notion of the operation of the ‘logic of chance’ as a category for understanding and interpreting Stephen’s experience. This will be done through the concept of “speculation”, which is argued to be a term that more adequately describes the complexity of the experience of being-serious about punting.

The System

A betting system is a method of choosing a procedure in gambling according to an organising schema. A betting system is therefore methodical and systematic. The core of Stephen’s betting system satisfies such a definition:

“The essential thing I am looking for are horses that finished further up the field than they were at the 400 (metre mark) last start and are running in a race at least as long, but preferably longer, this time around. I analyse every horse on the program this way, so that I can then assess each upcoming race according to what I now know about the way each horse was finishing on. I don’t worry too much about the degree and if a horse was really noticeably finishing on it’s a factor that’s always going to mentioned in the form-guides anyway. Of course if a horse is first at the 400 metres and retains that position well you’re going to include them regardless and they’ll most likely be amongst the favourites anyway so I’ll take that into consideration as well…once I have a list of those that finished on well I compare the distance of their last start and the race they are set for. The race has to be at least as long as the previous start and preferably longer and has to be the same class.”

The core element of Stephen’s betting system is the reliance on three simple principles: (1) the relative placing of a horse at the 400 metre mark and at the finish of it’s most recent start; (2) the comparative length of the last race start and the race under consideration: and (3) the comparative class of the last race and the race under consideration.

The first principle is regarded by Stephen as the core of his ‘betting system’. It is the principle by which Stephen applies a first logical rational cut to the field of possible bets that he could make. This rational strategy operates to delimit two categories of horses, those that warrant further investigation and those that are eliminated from consideration. Those horses that “finish on” over the last 400 metres are the only horses that can potentially carry Stephen’s bets in their next start.

As Stephen explained to me the second principle is guided by the logic that “provided the horse has at least as much ground to cover in the upcoming race, and preferably more, then it will be finishing on well again”. The second principle is a simple invariable rule that serves to eliminate further candidates from consideration, that is, those that will be racing over a shorter distance. According to Stephen this is not a particularly significant aspect mainly because “anyone who wants their horse to win is not going to set it for a shorter race if it ran out of room last time - so I wouldn’t be backing it anyway”.

The third principle, which eliminates any horse that will be competing in a different class of race, appeared to be at first glance to be a straightforward rule similar to that regarding the lengths of races. However, the effect of this principle is far more significant in its logical-rational operation. Stephen explained, in the negative, as being because “not doing this would mean I should have a different system, not one based on the way horses finish on”. Furthermore, he considered that this principle was absolutely essential if wanting a system that “doesn’t require a NASA mainframe”.
An explanation of this third principle lies in the structure and operation of ‘class’ as the “class or grade of race for which a horse is eligible” (Scott: 1985:88). The system of race classes is a complicated one involving questions of age and performance to establish gradings of relative strength, to try and ensure horses of like ability race against each other. Within the field for a particular race, it is the race handicapper’s task to equalise differences by allocating an appropriate weight to each horse within established guidelines. The third principle of Stephen’s betting system thus operates to eliminate, to the extent that this is possible without further time-consuming analysis, variables of the relative ability of horses and the relative weighting awarded by the handicapper and carried by horses. Stephen effectively controls for these factors, and maintains the salience of the variable of “finishing on” that he has isolated, by ensuring that the horses he considers under his system will be competing in races of the same relative class strength as in their previous start.

The betting system used by Stephen is thus a central part of his experience, driven by the “necessity to win overall as part of making a living”. In using his system Stephen steps back, to a certain extent, from the context of horse racing and his love of horse racing culture in deploying epistemic knowledge to eliminate candidates for carrying bets. This part of the system has been described as being epistemic, (or what we usually refer to as ‘scientific’ although these terms are not identical), because the knowledge generated is context independent and universal - in short the principles are invariable across time and space and take no account of any other contextual factors.

A Labour of Love

The betting system used by Stephen appears logical and coherent, as all good science apparently should. But is it enough to ensure that the bets that Stephen will eventually place are well-founded?

The answer to this question is possibly ‘yes’ in theory but is a resounding no in practice. Despite his description of the three principles described above as constituting ‘his system’, Stephen’s decisions regarding the placing of wagers are not made external to re-contextualisation within ‘horse racing culture’. In other words, he does not place bets solely according to the outcomes generated by the rational epistemic principles he has devised. In fact, I would argue, Stephen never or seldom places bets without reference to the context of ‘horse racing culture’ in which he so adeptly ‘plays the game’.

The process of re-contextualisation within horse racing culture involves first hand observation or second hand accounts of the everyday praxis of the racing industry. This part of being-serious about punting is what Stephen describes as his “labour of love”.

“What you have to have is the background knowledge, and you have to be close to what’s going on to have that. It’s knowing the form – and by that I mean races and I mean trackwork form, but it’s more than that too. You like to know who has picked up a knock or whatever. Really you have to go to the track, as often as it takes to keep a handle on things. I used to go at least once a week or so - early mornings, more when the big races and the big opportunities are coming up… It’s not difficult to do, it’s the best part of the day in Sydney especially in the spring and in the autumn. It’s definitely a pleasurable experience and I like the camaraderie of the world that you enter into there… Otherwise you want to know someone whose judgement you can rely

43 To enter into the system of classes early two-year-old races are set weight until the handicapper can assess each horse. There are some restricted two-year-old races for horses that haven’t preformed well. Once into three-year-old races there are a number of restricted and open class races. A well-performed three years old may only be eligible for open three-year-old events.
on. I make a few phone-calls most weeks, talk to a few people. Do a lot of listening and ask a few well-chosen questions – that’s the key… Once you have the basic knowledge of the way particular trainers and stables work you can expect what their strategies will be with a particular horse. With the big feature races and the big name horses pretty much everyone can see what’s going on. But down a tier or two it’s a lot more involved and you have to make sure you’re betting only on horses that are absolutely out there to win on that particular day… There’s no way of getting to that knowledge without getting involved and having contacts. Then it’s up to you to think things through…”

The labour of love that Stephen describes involves his practical implication in horse racing culture and the contextual knowledge that derives from this experience. As Dreyfus & Dreyfus (1998) describe, this kind of experiential knowledge is that which is characteristic of “experts” who know how to do something, (in this case what to look for and where to look and what information to give credence to). This kind of practiced and adept knowledge contrasts with the knowledge of “rules” that is characteristic of “novices”. For Stephen, his knowledge and discernment in relation to horse racing culture in general and in particular what he described above as the practice of “knowing the form”, marks him out as an expert, a serious punter whose decision making is not based solely on the ‘blind’ (or ‘blinkered’) application of rules – as described in his “betting system”.

The distinctions drawn here are, of course, analytical distinctions between the rational epistemic application of rules and the practical and experiential ‘soft knowledge’ of Stephen’s “labour of love”. In the practice of being a serious punter they are mutually implicated and co-constitutive aspects of Stephen’s punting endeavours. However, it is interesting to consider the way Stephen constructs his experience of being a ‘serious punter’ in relation to these two domains. Throughout the process of working with Stephen whenever he referred to his “betting system” he was talking about his series of three rational-logical principles. Stephen appeared from this perspective to accord priority and perhaps superiority to the knowledge he generated through this systematic process. He did not prioritise his experiential knowledge over his epistemic knowledge at any time, but rather seemed to consider it as operating to confirm the logic of his system. In other words, if what his knowledge about horses, training and the specifics of racing culture told him supported the choices promoted by his rational-logical knowledge then this illustrated the value of his system, not the inverse.

As an observer of Stephen’s experience of being a serious punter, there seemed to be little reason for this prioritising of one mode of knowledge over the other. Answers to this question were sought when talking to Stephen and seeking examples of the way these forms of knowledge aid in constructing his final wagering decisions.

The details of these discussions are beyond the scope of this paper, however at an analytical level they replicated the distinction developed between Stephen’s rational-logical ‘system’ (particularly in relation to the cyclical logic of ‘spells’) and the experiential component of his involvement in ‘horseracing culture’. Stephen’s construction of his experience of being a ‘serious punter’, continued in these discussions to prioritise his rational-logical principles over his complex experiential knowledge.

**The Dream**

Here is another story of gambling on horseracing to contrast Stephen’s systematic and involved experience of being a serious punter discussed so far.
A gambler said that he had a “surefire” tip, at great odds for an upcoming feature race in Sydney. He said that its current odds 25/1 would rapidly shrink when it performed well in lead up races and qualified for the feature race field. He suggested putting some money on for me with a bookie out at the Auditorium (Randwick bookies ring) during the week. He said that he had made a number of bets, for himself and for others, with a variety of bookies. (Note: In the final analysis he claimed to have wagered $1,300 on this horse in this race, standing to win almost $40,000 by the time bookies stopped accepting his bets). As the race was two months away I eventually gave up $20, to be placed on the nose on-course.

Two weeks later he remained enthusiastic and optimistic, although he did confide that the horse in question had run somewhat disappointingly (last) at its most recent start and had drifted to 33s and even 50s. However, he was continuing to put every spare cent on to the horse now as he was going to recoup even more money at these fabulous odds. When leaving he asked to borrow $20 until payday. The request was consented to after having provided funds in the past on a number of occasions.

Later in the week this gambler turned up at a local hotel but seemed a bit withdrawn, and the issue of the borrowed $20 was not raised. He was playing in the pub pool competition with intensity that could be described as being attributed to concentration. Eventually, after he had won the pool competition he offered me a drink, which I accepted. He then said, “I’ve got your twenty too”, handing me a bookies slip - $20 on the nose at 33s for the same horse. This was not impressive since the slackening odds seemed to indicate a less than wise investment.

News on the horse’s prospects was requested. News revolved around the fact that there was a rumour that it was carrying an injury and running out of time to be fit enough to succeed in a warm up event so as to qualify for the big race. Bewilderment surrounded why he was continuing to support such a risky venture, as the horse was going to need a small miracle to do well enough to make the field at all. As the chances of it failing to do so mounted, it appeared that the bookies were even playing pretty free and loose with the odds. An enquiry into the basis of his continuing support was made.

It had all started about four months prior when he had a dream in which a horse ‘R’ running on a clockwise track had won a race in front of a huge noisy crowd. The clockwise suggesting Randwick and the crowd size suggesting an important race, the gambler had then searched all the acceptances for the major carnival events at Randwick and had discovered a horse ‘RJ’ (the first word of this horse’s name being a variation on the name of the dream horse), which was entered in the Golden Slipper. From this moment on RJ had been a certainty.

After this things went from bad to worse. RJ ran poorly again; the gambler went to the track and came away convinced RJ had a minor leg injury, and if all went well could still make the Golden Slipper field. Meanwhile he continued to pile money on the thing, despite the fact that several bookmakers with whom he was familiar (he told me later) had stopped accepting his money. In the end he got a couple of bets on at 80/1 before RJs final opportunity to qualify. RJ finished fourth last and did not qualify for the Golden Slipper.

The point of this story is, of course, that it was Stephen (the serious punter) who also had the dream and the contrast between this aspect of his experience and that described above. Throughout the chain of events subsequent to his dream, Stephen continued to maintain his ‘normal’ punting activity, although with reduced resources due to the imperative of betting heavily on RJ. Subsequently, the whole affair was not discussed between us, apart from a comment Stephen made that he had either the wrong horse with that word in its name, or that
(more likely) he had the right horse but the wrong race. He said also that it was his own fault as he hadn’t done his research – which he normally does in such circumstances - but just gone with the first match to his dream. It was realised, from this conversation, that this was one not a one off, that dreams had provided the initial impetus for the eventual placing of bets by Stephen on other occasions. He assured me that this was the case and had resulted in some of his best wins.44

The Art of Speculation

The complexity of Stephen’s experience of being a serious punter involves rationality, imagination and emotion. Imagination, as Castoriadis (1987) has pointed out, has often been cast as irrational and as ‘other than reality oriented’. In fact, imagination is fundamentally implicated in any future-oriented activity. The ability to project the Self “as-future”, as Nietzsche (1994) described it, marks the historical emergence of ‘responsibility’ - as the ability of the Self to make promises or plans to which it remains faithful. It can be argued that we see such a continuity of rationality and imagination in Stephen’s experience of being-serious about punting.

The experience of being a serious punter, to stay faithful to the strategy and to the dream, is an experience grounded in emotion. Emotion has also often been cast as other being disruptive of the purposive coherence of rationality, not least in Weber’s formulations of types of social action (Barbalet: 1998:55-61). However, as Australian sociologist Jack Barbalet (1998) argues, rationality (even instrumental rationality) and emotion are better understood as continuous. It can be argued that Stephen’s experience of being a serious punter is not well-understood without reference to emotions, particularly to the importance of confidence to his activity. According to Barbalet confidence is best conceptualised as “self-projected assured expectation” (1998:101), and although there is no opportunity to explore this further here, it can be argued that such a conception needs to be incorporated in thinking about Stephen’s practice.

As described, Stephen’s confidence to act was generated in the earlier stories by very different factors (and through his confidence he generated other social actions – based on nothing other than the well-founded appearance of his confidence). Some versions of action theory could explain only the first of these factors (the system), as the basis of a second factor (the dream) does not lie within attenuated conceptions of what constitutes ‘reason’. However by viewing these stories in the light of an irreducible affective basis for action we are able to interpret these stories more usefully in terms of a common dimension (confidence) but without need to de-contextualise the two cases or to consider one as irrational or other than reality oriented.

Finally, the introduction of the notion of speculation, as a category of thought that I think is salient in both understanding and describing Stephen’s experience of being-serious about punting. The dictionary definition of the term speculation includes several dimensions of meaning:

“From Latin C16 speculat – observed from a vantage point, to observe or view, space of seeing the future.
To speculate: to form a theory or conjecture about a subject without firm evidence; to invest with the hope of a gain but with the risk of a loss
To count on something as probable or certain.
Engagement in any business enterprise or transaction of a venturesome or risky nature (SOED: Vol.2: 1963).”

44 Note: during the Melbourne cup carnival 2001 Stephen lost $600 on the Cup itself, but, following a dream about an old friend, the following day he backed a horse once again based on a same/similar name connection. On this occasion he won $2300
As these definitions suggest speculation involves taking up a position from which the future can be to some extent ‘known’. To ‘know where we stand’ is thus to somehow feel a sense of certainty (intellectually and emotionally) about the contours of our future experience. As Stephen’s discourse highlights, his sense of knowing where he stands is grounded in different forms of knowledge and modes of action. The confidence to act that Stephen displayed as part of the activity of being serious punter extends from a complexly constructed labour to “know where he stands” in relation to the field of possibilities (possible bets) that confront him. A rational action theory (RAT) understanding of the experience of being serious punter would interpret Stephens’ endeavours to make-certain the future as closing down the horizons of uncertainty and unknowability that characterise a future-oriented project, through rational-logical cognition, knowledge formulation and analysis leading to the optimum decision. The presence of the type of rational-logical knowledge and modality of action privileged by rational action theory is clear in Stephen’s discourse about his ‘system’. However, as argued, this aspect is only one of three analytically distinguishable forms of knowledge that are part of Stephen’s experience of being a serious punter and is probably not the most significant one in terms of his confidence to act. It can be contended that Stephen’s activity is best understood in the relatively broad terms outlined here, despite his description of the key part of his punting experience as being his ‘system’, that is, the rational-logical component.

It can be also argued that Stephen’s experience is better understood when considering how a complex labour of speculation, that is, as the construction of a position of knowledgeability about future eventualities is sufficient to trigger the act of placing wagers on particular horses in specific events. As seen, Stephen’s speculative activity involves the rational-logical construction and following of rules, a contextualised practical expertise and an imaginative component that together construct the confidence to act. The way Stephen coherently incorporates all these various aspects into his activities defines his social experience of being a serious punter.
References


The industry and responsible gambling

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Background on TABCORP

TABCORP is a publicly listed company with more than 60,000 shareholders. One of Australia’s leading providers of leisure and entertainment, TABCORP operates half of the gaming machines in Victoria through a network of independently owned venues under a dual operator system. The company also operates totalisator betting (TAB) in Victoria on thoroughbred, greyhound and harness racing, and fixed odds betting on sports, and has owned and operated Star City Casino in Sydney since late 1999.

Responsible Gaming Programs

In 1996, the Victorian Gaming Machine Industry Working Group was formed, comprising representatives from TABCORP, Tattersall’s, Clubs Victoria, Crown Casino and the Australian Hotels Association. The group developed and introduced an industry Accord and Codes of Practice in early 1997. The Codes include:

- Advertising Code of Ethics
- Licensed Venue Operators Code
- Gaming Machine Operators Code
- Crown Casino Code

The Codes cover a range of commitments, including the following:

- Display of information about available support services
- Participation in the Victorian self-exclusion program
- Encouraging large wins be taken by cheque
- Support of the Independent Complaints Resolution Process

During the period of 1997 to 2000, TABCORP introduced a number of responsible gaming programs and initiatives, including:

- Signs encouraging customers to set themselves spending limits
- Clocks required in all gaming rooms (mid-1999)
- Advertising warning messages (late 2000)
- Regular consultation with problem gambling counselling services and community groups
- Monitoring compliance with policies and requirements of Codes

In addition, TABCORP was a key founding member of the Australian Gaming Council (AGC), established in June 2000 with a mandate to develop and promote responsible gambling initiatives in conjunction with all elements of the gaming industry and in consultation with key community groups, problem gambling treatment providers, and government. TABCORP’s Chief Executive Officer Ross Wilson is Chairman of the AGC.

In October 2001, the TABCORP Responsible Gambling Code was introduced. The Code is unique in applying consistent principles across all three business units: gaming, wagering, and
Star City Casino. It is based on the Australian Gaming Council’s Framework for Responsible Gaming, and is aligned with the National Guidelines for Responsible Wagering Practices approved by the Australian Racing Ministers in May 2001.

The TABCORP Responsible Gambling Code has two key thrusts:

- Informed consent – provision to customers of further information about gambling products, the chances of winning, and problem gambling
- Assistance to customers who are displaying observable signs of distress, which may be associated with problem gambling

In addition, TABCORP endorses the Responsible Service of Gaming training course developed and launched by leading tertiary institution William Angliss in October 2001. The William Angliss course was developed co-operatively with industry members and in consultation with Gambler’s Help counselling service, and is nationally accredited. Importantly, it encapsulates the new direction set by both the AGC national framework Responsible Gaming Code.

Recognising that training is the key to implementation of the TABCORP Responsible Gambling Code, TABCORP has committed to ensuring all current permanent staff undergo responsible service of gambling training appropriate to their roles by November 2002. The company has also strongly recommended to its Tabaret gaming venues that they put all gaming room staff through the William Angliss responsible service of gaming training within two years.

Next steps
Over the next 12 months, TABCORP will focus on implementation of its Responsible Gambling Code.

This will entail development of a Responsible Service of Wagering course for all field and agency staff, and an overview course for TABCORP’s non-field and corporate staff. Star City staff will undergo a leading edge online course that meets the same stringent standards set by William Angliss program.

A program to allow customers to exclude themselves from entering TABs and using wagering accounts will also be developed.

Further information materials – in venue publications and onscreen as appropriate – will be created, especially in the areas of

- Sessional information eg total time played, $ put in, won, playedGame information – chances of winning, minimum and maximum bet

Finally, TABCORP will review its existing programs to monitor compliance, with an aim of expanding the criteria to incorporate all aspects of the new Responsible Gambling Code, and to involve representatives of community groups in the process.
Psycho-structural cybernetics model of problem gambling

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Abstract

Problem gambling is a complex phenomenon, which is multifactorial in etiology. Within the traditional body of literature on gambling disorders, approaches are often framed into four classical models: disease models, psychodynamic models, social learning models and cognitive models. The segregation of the factors implicated in the genesis of problem gambling directs research, which attempts to explain the behavior through the conclusions of one major framework. Consequently, the unique nexus of variables, which contribute to the behavior in individuals, is disregarded. The attempt to define the development of problem gambling behavior through a single model presents a hindrance to progressive research and intervention in this area. Psycho-structural cybernetics model is a comprehensive model of problem gambling, which emphasizes connections between several areas not sufficiently addressed by single models. This multi-dimensional framework is able explain the diverse pathways to problem gambling and promotes the development of effective assessment criteria as well as client and group-appropriate interventions. By exploring the interrelationships among the areas of psychology, biology, cultural-anthropology and linguistics, history, political science, sociology, cybernetics, economics and marketing, public health and their compounded impact on the development of problem gambling; it offers a holistic and interdisciplinary approach to explain and treat the development of problem gambling.

Introduction

Cybernetic theory was introduced decades ago, and has since gone through two major revisions. Each new version of the theory made cybernetics more applicable to real situations and more multi-disciplinary. From the mainly mechanical and technological reasoning of first-order cybernetics, to the understanding of observer influence in the second version, to the current amalgamation of constructivism with cybernetic theory for third-order, theorists and scientists alike have seen cybernetics and systems theory increase in complexity. The task at hand was to create yet another version, revising the previous cybernetic theories and correcting the
shortcomings. In this monograph, we are proposing a fourth-order cybernetics. We are introducing a new version of cybernetic theory because we are incorporating a paradigm shift. This monograph will discuss previous developments of cybernetic theory and mention certain problems. Then a summary of the proposed theory will be presented, documenting changes to previous versions. The interactions between structure and individual will be incorporated into the fourth-order cybernetics. The main objective of the development of the fourth version of cybernetic theory is an application to problem gambling behavior. The problem gambling model will be described in this article after the theory is presented. It must be stressed that the new version we propose is by no means complete. This introduction is simply the beginning.

First-order cybernetics

First-order cybernetics was developed from an engineering approach, and was useful for solving practical, technological problems. The first version of cybernetics did, however, introduce several core ideas that continued to provide the basis for future revisions. First-order cybernetics stressed the concept of clearly defining the boundaries of the subsystems and suprasystems. The suprasystem is the larger, more general system, encompassing many components and consisting of many interactions. Smaller subsystems can be found within the suprasystem. These subsystems can be isolated on their own and can be shown to have all the properties of larger systems. The subsystems work together and interact in order to form the larger suprasystem, although they can be studied separately. The most important idea in the first version was circular causality, or feedback. Feedback can be positive (deviation-amplifying) or negative (deviation-reducing). Only negative feedback warranted discussion within first-order cybernetics. System observers were seen as neutral parties. It could be said that first-order cybernetics was rooted in positivism, in that it was a scientific method of study that recognized only one ultimate objective reality. Although first-order cybernetics was a promising beginning, its power for explanation was limited to technological phenomena, and it was quite unable to extend into the sociological or psychological realm.

Second-order cybernetics

Second-order cybernetics followed and brought different developments. The observer was no longer neutral and was incorporated into the study of the system. The second version of cybernetics also concentrated more on positive feedback rather than the homeostatic negative feedback loop. Positive feedback loops were incorporated within systems. More importantly, though, were the concepts of self-steering and self-referencing. Systems, and in particular social systems, have the ability to steer themselves to a large degree. The power of systems to self-reference allows them to monitor their behaviours and adjust actions accordingly. Information collected about system functioning in turn influences the functioning of the system (with a certain amount of time delay due to the feedback loop functions). Where first-order cybernetics proposed one objective reality, second-order cybernetics sees multiple realities. Each system has its own reality, but that reality is unchanging across contexts for the particular system in question. Systems do operate in the same way in different situations.

Third-order cybernetics

A paper by Dallos and Urry (1998) introduced third-order cybernetics. The theory they present is an amalgamation of cybernetics and social constructionism, although the authors do go beyond this. If theory was bound by social constructionism, then it should only understand systems within different social contexts. But the paper introduces other elements such as cultural context. If using these other elements to interpret reality, the theory goes a step beyond the constructionist paradigm. Third-order cybernetics continues to see the observer as having an effect on the system, although the observer is not seen as having an expert role. This newer version of systems
theory stresses the importance of discursive analysis (the analysis of conversations and language) in defining power and the links between different systems. They claim that actions and meanings are jointly constructed and that it is quite impossible to predict exactly what will emerge. This would be an example of positive feedback. Dallos and Urry do criticize their own theory by saying that simply using social constructionism ignores the importance of other structural factors. This was a groundbreaking leap in the evaluation of cybernetic theory.

The above criticism became the starting point for a fourth-order cybernetics. The main revisions that we propose in order to produce a new version are the application of the emancipatory paradigm rather than a constructivist paradigm and a thorough discussion of positive feedback causes and effects.

**Fourth-order cybernetics: Emancipatory paradigm and postmodernism**

The emancipatory paradigm to be applied to cybernetics in order to introduce a fourth version will be as described by Mertens (1998). This paradigm sees multiple realities shaped by social, political, cultural, economic, ethnic, gender, and disability values. All aspects of the structure, not simply the social sphere, affect a system. The standards created by and within the system, as well as the actions carried out by the system, are a result of the different structural components it encounters. The emancipatory paradigm posits multiple structural realities. It is possible to view emancipatory reasoning as postmodern, however not all theorists accept this proposition. Patti Lather’s (1991) ideas regarding reciprocity and reflexivity are important postmodern concepts. Lather suggests a complex feedback process, reflexivity, in conducting research. The feeding of data back to participants in a study environment allows for active, reflective participation in interpretation and theory construction. The reflexive process and reciprocity are quite crucial to fourth-order cybernetics.

**Fourth-order cybernetics: Feedback loop**

The second addition to cybernetic theory to create fourth-order cybernetics is a thorough discussion of feedback. The basic feedback loop involves a disturbance from the environment having behavioral impact, which is essentially the input (perception function) of the loop. Then the input enters a comparator function and is tested against a reference signal from the higher order system, which leads to the operation of an output function (from Carver & Scheier, 1981). The comparator function is simply a step within the feedback loop where the input is compared to the standard value known to the loop, the reference signal from the higher order system. The reference signal is a standard set by a system higher in the hierarchy. The standard is used in order for behaviors to be monitored and, if required, altered by the system. Negative feedback loops are necessarily incorporated into the system. Systems tend to organization rather than deviation, as is stated in postulates of chaos theory. So every step or component in the system in fourth-order cybernetics has a built-in negative feedback loop, for both structure and individual. But it must be remembered that positive feedback does have a place in cybernetics. We propose that positive feedback loops do exist in systems (as proposed by second-order cybernetics), but that such loops are, for the most part, dormant. Uncontrolled positive feedback loops are inherently maladaptive because they further deviate from a goal state that can never be attained (Carver & Scheier, 1981). When faced with certain inputs that require the system to change, rather than remain static and maintain homeostasis, the positive feedback loop will activate itself. Once change is complete and the system is able to function comfortably after the proper modifications, the positive feedback loop ceases its activity. The negative feedback loop is then employed for its morphostatic, or deviation-reducing, function.

Carver and Scheier (1981) also present an overcompensation model for positive feedback. The feedback loop function is not instantaneous. The system must have knowledge of how much time
it takes for input to enter and output to exit the loop. If time is not taken into account, the system will receive incorrect input regarding its own workings. When the system does not recognize the time delay, actions may be demanded by the system that are inappropriate. By the time the system realizes the mistake, it may overcompensate. As the time delay continues to be misunderstood and the system continues to overcompensate for improper activity, the loop begins to spiral. The result is that a negative feedback loop becomes a positive feedback loop, with no obvious goal state.

There are also other ways in which the system’s feedback loops can cause change or malfunction. A feedback loop can improperly function through misregulation. One viable cause of misregulation is that the feedback loop perceives the input improperly. If the perception function is not operating correctly, the feedback loop will continue to operate with incorrect information. Another option for misregulation is an inappropriate reference value within the comparator function. If the comparator function contains a maladaptive reference value that is used by the negative feedback loop, incorrect decisions will be made within the loop. Either of these functional problems would cause inappropriate output to be returned to the system. The loop would continue to receive incorrect information and would continue to deal with it in maladaptive ways. It is also possible that a misregulation within the negative feedback loop could lead to positive feedback occurring. A feedback loop can continue to operate regardless of the higher order reference value, the standard by which all input is judged. We propose that it is possible that reference values can continually fluctuate, depending on the influences on the system. Although the feedback loop could continue proper operation in this case, there is the possibility that the system’s output is incorrect or that the input is perceived incorrectly. The continuing fluctuations could create a morphogenetic situation, or positive feedback.

Although negative feedback is crucial for system maintenance, controlled positive feedback is required by a system that must change. If positive feedback spirals maladaptively, the system is in trouble. Misregulation within the loop, however, can also lead to maladaptive results. Such misregulation can occur through incorrect input or through improper comparison to the higher order reference value. We are unable to fully perceive or appreciate the inner workings of a feedback loop, therefore, we cannot make a precise conclusion about problems within the loop.

Fourth-order cybernetics: A new theory

It is problem gambling behavior that provided the basis for the development of fourth-order cybernetics. We believe that problem gambling can be explained as a specific application of the aforementioned feedback problems. Understanding how problem gambling can fit into a fourth-order cybernetics model could lead to numerous insights. We see problem gambling as the result of an individual-structural interaction. The idea of multiple structural realities is required in order to fully incorporate all aspects of structure into the model. Politics, historical context, language, economy, psychology, and biology all contribute to the individual-structural interaction in order to produce problem gambling behavior. Each and every one of the components presented by all aspects of structure and individual have the ability to malfunction. However, it is most probable that structural components do not often have maladaptive instances of positive feedback (it occurs only to create temporary change with the system and the components). It is proposed that structural components and feedback loops have an influence on the individual components and feedback loops, possibly by providing higher order reference values. For example, the structural component of culture has an inherent ability to influence the standards the individual will set for him- or herself. If it is widely accepted by your culture to gamble, it is safe to assume that you will personally believe that gambling behaviors are acceptable. It should be noted that we believe gambling behaviors to exist on a continuum. Some individuals may experience the same type of situations and contexts, but yet only some develop problem gambling
behaviors. Positive feedback can and must occur in all individuals, it is only when this feedback becomes uncontrollable that gambling becomes a problem.

The proposed model of gambling relies heavily on feedback. Negative feedback loops are understood as being incorporated into the model, within each aspect that contributes to the individual-structural interaction. The linkages between individual and structure create feedback between both components. Problem gambling behavior is proposed to be a result of positive feedback occurring, and creating a constant spiral of deviation-amplifying behavior that the individual cannot control. This maladaptive spiral of behavior can occur either through fluctuations in reference values or a continual activation of the positive feedback loop in each system component. The model involves a structural and an individual component. The model is not necessarily hierarchical, although structure can be perceived as slightly “higher order”. Structure and individual interact and provide input and feedback to one another in order to eventually produce problem gambling behavior from the individual.

The structural component has both broad and personal influence. The broad structural component encompasses those aspects of the social structure that are influenced by large numbers of people, policymakers, or the general population, but that are essentially unaffected by the individual alone. Our multidisciplinary study includes under this sphere: history, economics, marketing, public health, politics and certain sociological variables. At the very heart of the model is the historical context. The time period in which the system finds itself is the foundation for all other aspects of its structure. Our model looks at problem gambling within the Canadian historical context, but there are commonalities of consequences of gambling across different societies. We suggest that historical context is the basis for the formation of the model, but that our model is not definitively exclusive to Canada. It is obvious that economics and marketing must play an important part in determining gambling behavior, strictly because gambling is a monetary activity. The objectives of casino marketing are to attract patrons, to induce and maintain playing while in the casino, and to produce repeat visits. Effective promotion strategies, availability of outlets for gambling and the payoffs involved in winning all have the ability to contribute to the proliferation of gambling behaviors (Eade & Eade, 1997). They create a context that facilitates gambling behaviour. Nibert (2000) suggests that lotteries promote the undesirability of work and consequently provide hope of winning the lottery in order to quit one’s job. This suggestion would also contribute to a structural context that would aid to entice the potential problem gambler.

The economic costs of gambling, and problem gambling specifically, have the ability to “ripple” out into the community (Frey, 1998). This “ripple effect” represents a positive feedback loop, where the behaviors of the problem gambler result in a broader negative effect upon other spheres, such as family, workplace productivity and the justice system. Without considering the economic effects of gambling, an important discipline is ignored.

Research has consistently indicated that the gambling population is a heterogeneous one, and that this should be considered when developing prevention, education, and treatment programs for problem gamblers. The problem gambling population is a very complex one. In developed nations, the current trend is toward increasingly pro-gambling attitudes and legislation (Abbott & Cramer, 1993). As gambling behavior is reconceptualized as a leisure activity with economic benefits, it becomes a more popular form of entertainment. This general social norm creates a context for promoting gambling. For some individuals, this may aggravate an existing predisposition leading to problem gambling. Popular media adds to the model as television, radio, print, films and the Internet continue to influence and restructure ideologies of gambling. For example, movies have the ability to serve as educational vehicles for social and cultural understanding and experience (Denzin, 1991). With this in mind, we could postulate that the media has the ability to send profound messages to the public regarding gambling behavior. This
medium could possibly facilitate a pro-gambling environment, as well as problem gambling. The political conditions of the individual’s society must be taken into account. Politics help to build the context surrounding the problem gambler. The political implications of the labels associated with gambling must be considered. The Criminal Code of Canada, and Canadians themselves, do not consider gambling to be a serious criminal activity. The government does not perceive problem gamblers as criminals, but rather as addicts. We must stress that we do not defend either label, but wish to present the argument that the government does not want to criminalize gamblers because that would put gambling revenues received by the government in jeopardy. The government makes state-run gambling legal and criminalizes ‘underground’ gambling activities. We suggest that this is done in order to eliminate competition in order to preserve the cash injection gambling revenues provide for the government. By condoning certain gambling activities, the government provides a context of facilitation. Thus, we can see the commonalities between the factors that make up the broad structural component. We believe that the main contribution from the broad structure is to create a facilitated context for gambling.

The broad structural sphere has the ability to influence the personal structural component. The personal structural component includes aspects of structure that are internalized by the individual and create direct effects. Such components are culture, language, family, gender roles, and other sociological group differences. Demographic issues show how problem gambling is a multifaceted phenomenon. We receive feedback from the system (or the society) based on our status as determined by the particular demographic situation. One’s age, ethnic background, religious affiliation and socioeconomic status (to mention only a few demographic factors) are all highly influential. Cultural situations, such as difficult transitions to new or marginalizing social systems, are able to create a loss of belief in personal control, and in an effort to acculturate themselves, individuals embrace aspects of the majority culture, including gambling behaviors (Alexander, 2001). There is also an evident relationship between family violence and addictive behaviors such as problem gambling (Kwan, 1998). We suggest that this connection shows parallels of a power and control struggle inside and outside the family. Other factors that are thought to have effects on problem gambling behaviors are socioeconomic status (for example, Morgan & Anderson, 1991), age and marital status/problems (Volberg, 1996; Wildman, 1989), dependence on community assistance (Lepage, Ladouceur & Jacques, 2000) and religious affiliation (Peacock, Day & Peacock, 1999). Problem gambling seems to be more prevalent in communities of people already marginalized and/or less well integrated into dominant social positions by virtue of their age, social class, psychiatric status, language abilities, marital status or ethnic background. Gender also seems to have a relationship with gambling behaviors. For women, gambling is seen as a safe, social outlet providing a diversion from home and children, whereas for men, the culture of masculinity influences gambling behavior by allowing them to express and validate their status, aggressiveness, competitiveness and strength (Dixey & Talbot, 1998). How the individual is defined and the statuses that they receive as determined by the system and society have a direct effect on how they interact within the system. In fourth-order cybernetics, as in previous versions, the importance of language is stressed. Linguistics contributes to the gambling system through the vocabulary used to define gambling and gamblers. This identification is generally negative and lead to struggles with self-awareness and identity issues. Parker (1997, 1999) suggests that language is a symbolic activity that occurs between components or individuals. Thus, whatever is communicated by the interactions between components serves to maintain the system and will have profound effects on the components themselves. The detrimental terms used to describe problem gamblers reinforce the notion of the gambler being unable to control his/her actions. We see this as representing a positive feedback loop, with the language used to define the gambler as creating a maladaptive spiral. Gambling and spirituality also have a relationship that cannot be ignored. We would like to present gambling as a modern ritual and spirituality as a traditional one. Modern gambling practices
reveal a consistent and universal human tendency to ‘ritualize’, ‘seek’, and ‘control’. Traditionally, spirituality served such purposes, but now gambling has provided an alternative. Gambling in various cultures around the world is accepted, and may indeed form the basis of systems of exchange and redistribution (Goodale, 1987). Understanding what gambling means to different cultures is quite essential to our fourth-order cybernetics model of problem gambling. Culture creates different contexts for problem gambling behavior. Culture and socioeconomic status work together in order to complete the picture of problem gambling. All aspects of structure must be considered in order to see the full picture. The personal structural component has a profound effect on the system that can create the problem gambler. One’s demographics place them in his/her own niche in the system, and affects interactions and outcomes.

The individual component of the model incorporates psychological and biological aspects. These factors influence the individual and in turn the structural-individual interaction. The psychological component involves implicit learning, consciousness, superstitious beliefs, cognitive dissonance, and the social rewards of gambling. Implicit learning is the process by which individuals acquire complex knowledge about their environment, independent of consciousness (Reber, 1993). Implicit learning is responsible for the development of erroneous, superstitious beliefs (Toneatto, 1999). Humans have the ability of self-reflection (as seen in feedback loops), this conscious effort can be marred by perceptual errors, distorted concepts, biased evaluation, and inappropriate attitudes. The aforementioned cognitive distortions can lead gamblers to believe that they have reliable methods of manipulating the outcomes of games (King, 1990). These cognitive distortions could influence the feedback loop, especially by providing faulty perceptual input. Gambling situations, especially casinos, can create a sense of group solidarity (Ocean & Smith, 1993). Being a casino regular can help develop a salient identity, increase social status and self-esteem (Ocean & Smith, 1993). Many pathological gamblers also have associated symptoms of anxiety and/or depression (Coman, Burrows & Evans, 1997). Another psychological influence can be found within the personality traits of pathological gamblers. They are not necessarily sensation seekers (however, some may be), but many try to avoid or reduce noxious physiological states or dysphoric mood through persistence in gambling (Blaszczynski, Wilson & McConaghy, 1986). The aforementioned cognitive distortions and distressed emotional states can be the result and cause of a positive feedback loop. As the individual consistently begins to rely on one's superstitious beliefs and wishes to avoid emotional discomfort, positive feedback continues, and problem gambling results. All of these cognitive distortions are the result of interactions with the structural context in which the individual finds him or herself.

Biology would include different physiological components and genetics. In terms of genetic causes, Schork and Schork (1997) found that compulsive and addictive phenotypes, such as problem gamblers, can be attributed to multiple alleles having a cumulative effect in which the environment also plays an integral role. This finding fits well into our proposed model because it directly reflects a structural (environment) and individual interaction. It has been found that low levels of serotonin have been associated with severe forms of problem gambling (Carrigan, 1998). In the nucleus accumbens, which is the part of the limbic system involved with mediating arousal and reward, reduced sensitivity or malfunction of dopamine transporters has been observed (for example, Jentsch & Taylor, 1999). Structural anomalies have also been found in the prefrontal cortex, which mediates some types of impulsive behavior (Rugle & Melamed, 1993). These chemical anomalies can be regarded as a positive feedback loop, because the normal levels are not maintained by a homeostatic, negative feedback loop. Note, however, that the sample populations for the biological component tend to be drawn from extreme cases of problem gamblers. How biology affects the rest of the continuum remains unexplored.
Within each component of the problem gambling system is a negative feedback loop. Each component has the capacity for self-monitoring and self-regulation through its negative feedback loop. The system includes negative feedback loops because such loops are deviation-reducing. As chaos theory states, there is underlying organization to every aspect of the natural world. From this postulate of chaos theory, we propose that systems inherently “want” to be organized, hence negative feedback loops will exist. However, systems and their components do encounter many situations that require them to change. These instances would require activation of the normally dormant positive feedback loops. Once change has occurred and the system perceives the ability to function properly in its new state, the positive feedback loop stops and maintenance is restored with the negative feedback loop.

It is only in problem gamblers that misregulation occurs. Some gamblers (i.e., rich ones) can afford thousands of dollars in gambling losses (Suissa, 2001). This is an example of what we, the authors of this article, coined differential income-based outcome coping. An individual’s income has the ability to affect coping strategies and effectiveness. Other gamblers cannot afford to lose such large amounts of income, yet continue to gamble uncontrollably, exhibiting problem gambling behaviors. The feedback loop normally used to self-regulate and maintain homeostasis is malfunctioning or the positive feedback loop normally required for short-term change continues to operate. Another example would be of the gambler who simply cannot leave. Some problem gamblers are unable to leave the tables, whereas other “normal” individuals can leave at any time. This inability to remove the self from the problem gambling situation is explained in fourth-order cybernetics as a maladaptive functioning of the negative feedback loop informing the individual of their gambling experience, or possibly the positive feedback loop remains activated.

Conclusion

Cybernetic theory has moved from a mainly technological stance in first-order cybernetics, to a more socially-concentrated view in second-order and then to a multi-structural paradigm in the third version. By creating a paradigm shift, we were able to propose a fourth-order cybernetics. Previous versions of cybernetics tended to gloss over the discussion of feedback, we thought it important to explicitly explain the different feedback loops in the system and how positive feedback results. This theory was developed and refined for application to problem gambling behavior. Rather than showing one distinct, traceable path to problem gambling through structure and individual, the model presents multiple causes and influences leading to such behavior. The theory does show promise for explaining other maladaptive behaviors. What we present is a working theory that is in the initial stages of development. We wish for our theory to present the entire range of factors, which contribute to problem gambling. As such, fourth-order cybernetics is a work in progress.
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Gender differentiated motivational style and its interaction with acculturation process: their role in second language learning delay and mental health maladjustment/addiction, especially problem gambling, among Iranian refugee and immigrant youth in Toronto (exploratory study): Phase 1

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Abstract
Migration as a recent fact of life among Iranians, exposing them to acculturative uncertainties. Acculturative stress can be modulated by many factors, and it can manifest itself in different ways including lowered mental health status, social and economical marginalisation, and risk taking behaviors such as substance abuse and problem gambling among Iranian immigrant and refugee youth. Academic performance is a further difficulty faced by these youth because of the difficulty of second language learning. The goal of our model is to conceptualise these connections within the framework of instrumental versus integrative motivational style. Based on this model, we are designing an education oriented prevention program to address the issue of risks of second language learning delay and the development of alcohol, drug and gambling addiction among the new immigrant and refugee youth population. This project is divided in 3 phases: designing, implementation and evaluation. We are presenting the first phase of this project in this article.

Introduction
Migration has become a common trend and an expected fact of life among the majority of underdeveloped and developing nations in general and Iranians in particular. According to statistics for 1985-1994 from the United Nations High Commission for Refugees, Iran has produced more than two million refugee status immigrants since the 1979 revolution (Forti & Pittau, 1999). Many have made Canada their new home (Statistics Canada, 1996); consequently, Iranian immigrants and refugees have been a growing ethnic group in Canada, especially in Toronto. Statistics Canada (1996) reported that the number of Iranians residing in Toronto was
21,565, a number which has risen significantly since then. Statistics Canada (1996) has also identified the Iranian population as the twelfth largest ethnic group in Toronto. This immigration transition places these newcomers in a process that is termed acculturation process (Berry, 1990).

The process of acculturation involves cultural and psychological changes that result from the contact between peoples belonging to different cultures and exhibiting different behaviours (Berry, Poortinga, Segall & Dasen, 1992). Iranian immigrants and refugee, for instance, (like other immigrants and refugees) experience acculturation when they enter into their new homes. In order for the acculturation process to truly be experienced, there must be continuous, first-hand contact between the cultures and some change in psychological or cultural phenomena (Berry, 1990). Acculturation takes place on a population level as well as on an individual level (Berry, 1990). Factors affecting the acculturation process include, but are not limited to, the nature of the host society (pluralistic or monistic) (Georgas, Berry, Shaw, Christakopoulou & Mylonas, 1996), generational status and age (Georgas et al., 1996), number of contacts with the host society, pleasantness of these contacts, the ability of the host society to meet the needs of the immigrant society and the evaluation (positive or negative) of the contacts with the host society (Berry, 1990). Georgas et al. (1996) suggest that youth are less traditional in their values that they bring with them to their new country, and they would be more likely to shed them after immigration.

Acculturation is not always a successful process. The concept of acculturative stress refers to one kind of stress in which the stressors have sources in the process of acculturation. There are many factors that modulate the development of acculturative stress. Different modes of acculturation exist which refer to the amount of new culture that the immigrant has absorbed and the amount of old culture that the immigrant has shed. These modes are determined depending on the situation whether immigrated individuals/group utilized an intrinsic (integrative) style of motivation (an act done for individual reasons and for internal satisfaction) when began absorbing the new culture or if they used an extrinsic (instrumental) style of motivation (an act done for external benefits such as getting along in a foreign country or meeting an academic requirement). Acculturative stress can also be modulated by the phase of acculturation (Berry et al., 1992). If the individual remains in a state of crisis with the dominant society, stress is a likely result. It has also been suggested that gender can affect the nature of acculturation.

The massive wave of migration from Iran to Canada occurred mainly after the Iranian revolution in 1979, largely for reasons of personal, economic, or political security. Because of the social and cultural turmoil brought on by the war, immigration, and adjustment to the Canadian society, Iranian refugees and immigrants have experienced change in family, status, finances, language, and other areas, resulting, overall, in high levels of stress (Pliskin, 1992; Hassen & Sardashti, 2000; Khavarpour & Rissel, 1997; Bagheri, 1992). This wave of Iranian immigrants and refugees was, as a result, identified to be very prone to developing psychosocial stress (Jalali, 1996; Bagheri, 1992). These factors are assumed to have interfered with their integration into Canadian society by alienating them from their surroundings. Refugee immigrants require special consideration due to the circumstances of their migration. Voluntary involvement in acculturation (i.e. voluntary migration) may be less difficult and less stressful on the group and individual level (Berry, 1990), however, many are not necessarily voluntary migrants. The reasons for their departure from their home countries caused great levels of stress, and this stress continues throughout the process of adaptation. During this process, the psychological needs of this group are for the most part ignored. This high stress situation can be devastating for the immigrants and refugees.
Acculturative stress can manifest itself in different ways. Sam and Berry (1995) suggest that acculturative stress may be related to many psychological changes including lowered mental health status, feelings of marginality and alienation, heightened psychosomatic symptom levels and identity confusion. Acculturative stress may underlie a reduction in the health status of the individual physically, emotionally and psychologically (Berry et al., 1992). It is possible that this lowered mental health status may manifest itself as substance abuse and/or problem gambling. It is possible that these behaviours are also present problem behaviour as a result of acculturation processes.

Many researchers have suggested a connection between immigration and increased risk of developing mental health/addiction problems (Hovey & King, 1996; Kushner, 1984; Trovato, 1986; Minas, Lambert, Kostov & Boranga, 1996; Sundquist, 1993). Since problem gambling is a mental health/addiction problem, issues identified in mental health/addiction are also relevant to problem gambling. According to these researchers, some of the factors causing this correlation are inadequate language skills, limited social and financial resources, a feeling of not belonging in the host society, a sense of anxious disorientation in response to an unfamiliar environment, and a conflict between traditional values, norms, and customs and those of the new country. Consequently, the acculturation process can result in elevated levels of stress stemming from maladjustment.

The acculturation stress that individuals and families go through when they resettle in a new country may cause children's behavioral and school problems, financial hardship, substance abuse, depression, and loss of status. For many, stress involves leaving family, friends, community, and homeland for life in a new country, where they must learn a new language as well as adjust to a new environment, and perhaps a new school with different teaching approaches (Drachman et al., 1996; Diaz & Santiago, 1998; Liebkind & Jasinkaja-Lahti, 2000). In addition, since the respective cultures of the countries of origin and destination are vastly different, adjustment becomes even more difficult.

In all cases, immigration is a transitional experience. Immigrants and refugees enter a new culture with customs, assumptions, expectations, institutions, laws, and language that differs from those of their native culture. The roles they play in the new culture differ from their roles in their native culture, as does how they are perceived by others. Immigrants and refugees, however, may not be aware of these new roles and perceptions. For many, suddenly being labeled and treated as a member of an ethnic minority group is yet another shocking transition.

Youth are the most vulnerable members of these migrating families when it comes to cultural transition (Allan & Hill, 1995; Lucas, 1997; Hovey, 2000; Drachman, Kwon-Ahn & Paulino, 1996). Upon arrival to a new country, they may find it especially difficult to face the challenge of learning a new language, finding replacements for their friends and relatives they have left behind in their home country, and continuing to perform well academically under the circumstances. While many adjust successfully, others have difficulty coping and meeting these challenges (Lucas, 1997; Flaherty, 1999).

Berry et al. (1992) also suggest that the younger are usually more exposed to acculturating influences. The younger immigrant population is therefore of research interest as it seems to represent a special group of individuals. Sam and Berry (1995) suggest that immigrant and refugee children and youth in particular require special research attention.

Getting through adolescence is difficult enough for anybody. Early adolescence is indeed "unmatched in the juxtaposition of simultaneous changes -cognitive, biological, social, and
emotional - by any other period in the life span" (Takanishi, 1993, p 3). Throughout the adolescent years, young people "tackle two major tasks...identity formation and development of self-worth and self-efficacy (Nightingale & Wolverton, 1993, p14), both of which are shaped by contextual as well as individual factors (Peterson & Epstein, 1991). For immigrant and refugee youths, these tasks are particularly challenging because as adolescents, they are not only defining themselves as individuals, but also learning what it means to be a member of a non-dominant group in Canada. To negotiate the demands of this developmental phase successfully, immigrants and refugees must strike a balance between the two systems - their culture and Canadian culture. Learning how to balance the cultural tug between home and school inherent in this identity formation process is painful (Spenser & Dornbusch, 1990). Many youth who are unable to cope with the large amount of stress involved in this experience emotional difficulties (Hovery, 2000; Pawliuk, Grizenko, Chan-Yip, Gantous, Mathew & Nguyen, 1996; Forti & Pittau, 1999; Igoa, 1998; Segel, 1996), become socially and economically marginalized (Fortuijn, Musterd & Ostendorf, 1998; Bennett, Rigby & Boshoff, 1997; Williams & Berry, 1991), succumb to alcohol, drug and gambling addictions, show poor academic performance or even drop out of school prematurely, and in many cases, get involved in criminal behavior (Hahn, 1987; Hicks & Connolly, 1995; Kazdin, 1995; Michaud, Ferron & Narring, 1996).

A number of studies have, for instance, shown that immigrants and refugees in general but youth especially turn to alcohol and drugs as a way of dealing with the stress of moving to a different culture. In fact, studies have shown that substance use and similar risky behavior among immigrants and refugees may be greater than that of their country of origin, and in some cases, their country of destination (Caetano & Medina-Mora, 1986; Kar, 1999).

Another problem facing immigrant and refugee youth is gambling. Despite a growing awareness of the seriousness of problem gambling amongst youth, especially ethnic minority youth, little research has been undertaken on it, especially in respect to the impact of gambling on ethnic minority youth, for which virtually no literature exists (Shaffer et al, 1994; Toronto District Health Council, 1998). Yet according to Shaffer et al (1994), more youth are gambling now than ever before. Perhaps they have been encouraged by the increased presence of gambling activities in society due to the development of casinos and state sponsored lotteries, the explicit endorsement of gambling by governments and hospitals, or the absence of warnings from public health officials who may feel political conflicts of interest. Studies have shown that the majority of youth gamble (Lesieur & Klein, 1987; Ladouceur & Mireault, 1988; Ide-Smith & Lea, 1988; Frank, 1990; Scarpitti, 1989). According to Winters et al (1993), it is common for adolescents to gamble at least once prior to age 15. Adolescent gamblers generally prefer cards, bingo, betting on games of personal skill or on sports teams, and lottery tickets with pull tabs and scratch tabs (Turner, McDonald, Bartushak & Zangeneh, 2001; Winter et al, 1993). Despite organized gambling activities being illegal for adolescents, gambling remains a popular recreation outlet for youth (Winters et al 1993). In addition, because adult pathological gambling is viewed as a progressive clinical condition, adolescent problem gamblers may be the most vulnerable group to develop a problem gambling condition. Winters et al (1993) have identified several demographic and psychosocial correlates of adolescent gambling. According to them, gambling involvement and problem severity scores, which were higher among males, also tended to be higher amongst teens with gambling parents, poor grades, and histories of delinquency and drug abuse.

Unsatisfactory academic performance is a further difficulty faced by immigrant and refugee ethnic minority youth because of the difficulty of second language learning (SLL). While immigration has affected all aspects of Canadian life, nowhere is the changing demography of Canada more keenly felt than in education. Immigrant and refugee students of secondary school
age especially face major difficulties in acquiring a second language and succeeding in school because they have much less time than elementary age students to learn English/French and master the academic content. (Chips, 1993). At the same time as they are dealing with the difficult developmental transitions from childhood to adolescence to adulthood, they must negotiate a series of critical transitions in order to progress through school. They must also adjust to the transition from their native country to Canada, from middle to high school, from bilingual and second language classes to content area classes, and from high school to post-secondary education. Further problems result from immigrant and refugee youth's relations with their peers. Students learning English/French often find it difficult to be accepted in well-established groups of English/French-speaking students.

With the majority of recent immigrants and refugees coming from non-English/French-speaking countries, schools are receiving increasing numbers of students who do not speak English/French at home and who have little or no proficiency in either language. Because they will be experiencing many difficulties, equitable access to education for new adolescent immigrants and refugees (Pongudom, 1995) should be an important goal of SLL. Yet typically, little academic or personal assistance is given to help students successfully adjust to these changes. It is disconcerting that SLL funding has been falling short, despite the rapid increase in enrolment of children from non-English/French speaking background, a great portion of whom require instructional services to help develop academic skills in English/French (Willig, 1985). Furthermore, in most schools, SLL has come to be regarded as marginal, a "dummy program" (McKay & Wong, 1996). As a result, many non-native English/French speakers are coming out of the secondary system with poor reading, writing and comprehension skills in English/French, often resulting in immigrant and refugee students being regarded as linguistically inadequate (McKay & Wong, 1996). While this is a false assumption, for poor performance in a second language does not imply general linguistic deprivation, it is still commonly accepted. It, therefore, affects teachers' general expectations of their students' chances of success.

Another element that plays a role in the process of adolescents' SLL is the social support. Parents themselves are often forced to adjust to the changes of immigration transition including loss of status by working in long-hours and low-paying jobs. They also go through the acculturation stress and have hard time adjusting culturally with their new environment. For these and many other related reasons, some parents are unable to offer the kind of support they used to give to their children in their home country. Because of the lack of support in a stressful time, adolescent immigrants and refugees may suffer psychological problems. Personal maladjustment is a major contributing factor to SLL difficulty (Pawliuk et al 1996). It has been suggested that children of parents who adopt an intergenerational mode of acculturation function within normal limits, while those of separated or marginalized parents display problematic functioning (Safdar, 2001; Pawliuk et al 1996). Better functioning was also observed in children of immigrant and refugee parents who speak the language of the host culture well, and have professional social status and supportive friends. Conversely, difficulties have been found in children of parents who do not speak the host language well and who lack a supportive social network (Pawliuk et al 1996). Also, Rotheram-Borus (1990) reported that adolescents who classified themselves as either mainstream or bicultural reported that they had more behavioral problems than those did who classified themselves as strongly ethnically identified. For this reason, the degree of pluralism in the larger culture and its acceptance of ethnic groups affect the stress experienced by the acculturating individual. Even the assimilated children may not be completely accepted by members of the larger culture because they are of a "visible minority;" if so, this could contribute to the low levels of social competence and self-esteem shown by the majority of these children. On the other hand, children's low self-esteem may reflect a lack of acceptance of their own ethnicity (Diaz & Santiago, 1998; Phinney, 1990). Therefore, children of immigrants and
refugees are faced with a nearly unsolvable dilemma: low self-esteem may follow if they reject their ethnic culture and assimilate to the larger one, yet the majority culture may never accept them because of their ethnicity.

Currently, a large body of research exists concerning the impact of attitudes and motivation on second language acquisition. An important element of motivation is that it is sensitive to success and failure. Motivation, self-efficacy, and anxiety are closely linked. Satisfactory self-efficacy, which contributes to maintenance and even enhancement of motivation, provides little cause for debilitating anxiety. On the other hand, reduced self-efficacy as a result of a disappointment with one's performance can lead to reduced motivation.

For this reason, the relationship between attitudinal and motivational variables in relation to proficiency in a second language is given a great deal of consideration in research on language learning (Gardner, 1983; Clement, 1980; Abu-Rabia, 1997). The reasons for people undertake language learning have been classified as either intrinsic (integrative) motivation or extrinsic (instrumental) motivation (Abu-Rabia, 1996). Typically, while the goal of instrumental motivation is focused on a more utilitarian value of linguistic achievement (for example, securing a better job), the goal of integrative motivation is to learn more about the target language group and identify with it. Those with a sympathetic attitude toward the target language speakers and culture were found upon empirical examination by Gardner (1959) to be more successful in acquiring a second language than those with negative attitudes toward them. Despite such efforts to understand the function of motivation in language learning, the role of gender-specific motivational style in second language learning is being largely ignored.

Gardner's study was recently replicated by Abu-Rabia (1996) to examine the second language learning achievement of male and female Arab students in Canada. Abu-Rabia claimed that the male Arab students were instrumentally oriented toward English and Western culture but did not emotionally support and identify with Canadian society. In contrast, the female Canadian Arab students felt emotional support for and identification with Canadian society. According to Abu-Rabia (1997), the integrative attitude of the female Arab students in Canada had a positive impact on their second language learning. As a result, they were more likely than their male counterparts, who had more negative attitudes and displayed dominantly instrumental motivation, to adopt the English language and Canadian culture. Abu-Rabia (1996) argued that this difference could be attributable to the low status of women in their countries of origin. Furthermore, Abu-Rabia, argued that identification with the Canadian language and society might be a sign of rebellion against conservative behavior.

Abu-Rabia's studies displayed major flaws and unsupported claims, and failed to adequately explain how motivational style was different between male and female. Abu-Rabia's conclusion regarding females' integrative motivation as a sign of rebellion is highly speculative and unsupported. He also failed to clarify the specific nationality and religious background of Arab participants in Canada. Not every Arab country practices the same customs. Arabs residing in Canada come from a diverse background, ranging from open, liberal societies like Lebanon to restrictive, conservative societies like Palestine and Saudi-Arabia. We believe that it is not the status of females in the conservative countries per se that orients them toward integrative approach when they immigrate to a more liberal society, but instead we think that it is a more general property for female gender to orient towards this particular style of motivation. This would also questions Berry's claim when he suggested that females tend to experience more stress when they immigrate to a new country compared to their male counterparts (1990). Considering that female tend to use integrative style of motivation, it makes it less likely for females to be more exposed to acculturative stress.
It is possible to suggest a model that would conceptualize the connections between acculturation, stress, mental health/addiction problems, and second language learning. Due to many aforementioned factors, the process of acculturation is not necessarily a smooth transition from the traditional, homeland culture to the new dominant society. Many new immigrants and refugees, in particular Iranians, have feelings of marginalisation, probably mostly due to the involuntariness of their migration and the large differences between the cultures. This position of marginalisation has the ability to preclude the development of acculturative stress. The existence of acculturative stress can lead to the development of a lowered mental health status. One possible manifestation of this decline in mental health is problem gambling, as problem gambling behaviour is a mental health/addiction problem. There is also, however, a possible connection to the degree of success in second language learning. Educational experiences within the dominant society are of importance to the acculturation process (Berry et al., 1992). Berry et al. (1992) also suggest that prior knowledge of the dominant society’s language can lead to better functioning under acculturative pressures. There is obviously a connection between second language learning and the development of feelings of marginalisation and acculturative stress. It is possible that delays in second language learning are simply the result of feelings of marginalisation during the acculturation process. Another possibility is that inability to learn the new language successfully can lead to stress, which in turn can lead to destructive behaviors such as drug/alcohol abuse and problem gambling. These relationships need to be explored.

A common thread running through the reviewed literature suggests a close relationship and interaction between gender, motivational style, post-immigration mental adjustment and communication difficulty in the form of second language learning delay. It also calls for preventive programs for high-risk ethnic minority youth students. However, no research and school-based prevention program currently exists to address the issue of risks of SLL delay and the development of alcohol, drug, and gambling addiction among the new immigrant and refugee youth population in Ontario schools.

We have divided this project into 3 phases: Phase I, which is the designing phase, includes project design, and the construction of the working prevention program. Phase II which is the implementation phase includes running the experimental design, testing hypothesis and conducting the prevention program. In phase III, which is the evaluation phase, we will evaluate the effectiveness of the prevention program and its relevance to the ethnic youth population's need. Currently, we have completed the first phase of the study and we are beginning the second phase.

The current project is designed to explore and address the following questions:
1. Are motivational styles (instrumental versus integrative) gender differentiated?
2. Having controlled for the pre-covariant factors (gender, motivation, SLL, and mental health adjustment), would the prevention program have any effect on the post-covariant factors (gender, motivation, SLL, and mental health adjustment)?

For this purpose, we are aiming to design and evaluate a culturally-sensitive motivational/educational prevention program to address drug/alcohol abuse, problem gambling, and SLL delay among high-risk ethnic minority youth students.

Design
The predictions of this model are as follow: Gender will have a correlation with motivation/motivational style in trial 1. Motivation/motivational style in trial 1 will have a unidirectional effect on motivation/motivational style in trial 3. Acculturation stress in trial 1 will have a unidirectional effect on mental health adjustment in trial 3. SLL performance in trial 1 will have a unidirectional effect on SLL performance in trial 3. Prevention will have a
unidirectional effect on mental health adjustment in trial 3. Prevention will have a unidirectional effect on motivation/motivational style in trial 3. Prevention will have a unidirectional effect on SLL in trial 3.

The design of this research is based on the path model (Aron & Aron, 1994) (see Appendix).

**Experimental group**

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variable</th>
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<tbody>
<tr>
<td>ESL performance progression</td>
<td>Gender</td>
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<tr>
<td>Mental health maladjustment</td>
<td>Immigration status</td>
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<td>Length of residency in Canada</td>
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<td>Prevention</td>
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**Mediating Factors**

- Motivational style
- Current ESL Performance

**Control group**

<table>
<thead>
<tr>
<th>Dependent variable</th>
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<td>Length of residency in Canada</td>
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</tbody>
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**Mediating Factors**

- Motivational style
- Current ESL Performance

**Prevention Protocol**

**Session One**

A) Purpose & rules of group behavior outlined

B) Information dissemination

- Recognizing pressure to use drug/alcohol use & gambling
- Health consequences of drug/alcohol use & gambling
- Confusing/inadequate values (alienation, conflict of values) towards Canadian and their own ethnic culture
- Identify pro-drug/alcohol/gambling influences
- Mock gambling
- Role of luck & skill in various games
- Identify internal & external influences
- Risk associated with drug/alcohol use & gambling (discussion, poster-making & role playing)
- Psycho-social risk factors (increasing awareness)
• Ethnic identification & acceptance
• Identifying strategies for attaining the goals (short & long term goals)
• Issues of randomness, skill & luck

Session Two
• Identifying existing coping skills (strength & deficit)
• Psycho-social risk factors (increasing awareness)
• Personal & social skills
• Social & communication skill
• Ethnic identification & acceptance
• Identifying existing coping skill & deficits (coping diary)
• Identify the problem
• Issues of randomness, skill & luck
• Teach identifying & analysing risky situations

Session Three
• Behavioral & emotional self management
• Managing anxiety, negative mood & anxiety
• Low self-esteem
• Motivation against use
• Resist pro-drug/alcohol/gambling influences
• Behavioral self management
• Strengthening positive elements
• Emotional self management (relaxation, cognitive restructuring & self instructional techniques)
• Those who won/lost in gambling, used drugs/alcohol are encouraged to tell others how they felt

Session Four
• Building positive coping skills
• Coping with pressure to use
• Alternative coping skills
• Internal coping skill e.g. coping with negative emotions
• Developing interpersonal relationship
• Resisting advertising appeals
• Resisting social acceptability (everyone uses)
• Resist pro-drug/alcohol/gambling influences
• Skills to avoid
• Resistance skills
• Coping skills (taught, role played, practiced)
• Ethnic identification & acceptance
• Personal & social skills to cope with adolescence & immigration transition
• Enhancing social support network
• Strengthening positive elements
• Interpersonal communication, assertiveness & peer resistance skills, social skills

Session Five

• Problem solving strategies practice
• Change attitude, beliefs & normative expectation
• Ethnic identification & acceptance
• Strengthening positive elements
• Personal & social skills to cope with adolescence & immigration transition
• Problem solving strategies
• Identify the problem
• Consider new interpretation
• Formulate cognitive & behavioral coping
• Select the most promising coping response
• Rehearsal
• Assess coping response
• Skill consolidation, integration & application of coping skills
References


Macedonian culture, gambling and ‘material happiness’

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Abstract
Kildonan Child and Family Services is an Uniting Church welfare agency that operates in the growth corridor of the Northern Region in Melbourne. Kildonan has 19 distinct programs operating from its City of Whittlesea office. The Social Advocacy Group includes financial counselling, community development, a no-interest loan scheme and community housing. The financial counselling program includes programs for non-English speaking communities; people with gambling and financial issues and a family violence financial counselling program. Languages offered by this group include Macedonian, Vietnamese, Arabic and Maltese. The City of Whittlesea hosts the largest community of Macedonian people in Australia. The City of Whittlesea Household Survey 1999, indicates that 15.6% of the City of Whittlesea’s population were born in the Republic of Macedonia and 22.6% of population are Macedonian speakers. Kildonan's work with the Macedonian Community has been intense. The Macedonian worker, herself a migrant, works, lives and is a respected member of the local community, enhancing and strengthening these links. The community has educated the agency and workers about their culture, concerns and needs and Kildonan has adapted its service delivery in response to this. A mutual respect has evolved. Gambling is not a recent phenomenon, but has ‘boomed’ in recent years affecting all communities. Macedonians have also entered the race for ‘material happiness’. This paper will discuss Kildonan's work with the Macedonian Community, looking at the contradictions, cultural conflicts that gambling encourages. Traditional culture, political and economic factors, waves of migration, settlement in Australia will be discussed and links drawn to possible casual factors which have lead to problem gambling within this community.
Introduction

Gambling is an old phenomenon. In Victoria the growth in the industry has been massive. In our community, the City of Whittlesea (located in the northern growth corridor of greater Melbourne) with a population of 115,000, has a total net EGM expenditure for this area in 2000-01 of $78.26 million. This equates to a net EGM expenditure per 1000 residents (18+) of $934,426 (Office of Gaming Regulation).

The City of Whittlesea hosts the highest concentration of Macedonian's in Australia. The Macedonian Community represents 15.6% of those born in the Republic of Macedonia and 22.6% whose preferred language is Macedonian’ (City of Whittlesea Household Survey, 1999).

Little research is available as to why gambling has become so popular within the Macedonian Community, we can only 'speculate', largely anecdotal from our case work, and interviews conducted with community leaders and workers, and our knowledge and understanding of the community and the culture.

Kildonan is very fortunate to have as a member of the Social Advocacy Group, a Macedonian, first generation migrant, who lives and works as a Financial Counsellor and Community Development Worker within the community. It has been with her assistance that the agency has developed a working rapport with the Macedonian Community. Through mutual learning a healthy respect between the community and agency has developed.

It is surprising that significant numbers of the Macedonian Community have embraced gambling, as gambling is actually in contradiction with traditional Macedonian values. Macedonians are known as hard working and as having a very good savings ethic. Macedonian people always plan to have something left over for tomorrow, for the future, not only for themselves but also for their children.

Traditional values for a good and happy life requires, 'good health and warm bread'. This has been the foundation and has been instilled in generations. For most Macedonians living in Australia 'warm bread' (enough food on the table) have been available, but 'good health' is being eroded with gambling having a detrimental effect on the social and emotional well being of the community.

People who have accrued wealth (paid off house, bought property for an investment) as a result of hard work are admired and held in high esteem within the community.

Problems arise when working for this status becomes tedious and never ending. Gambling appears to offer a quick fix solution and a new attractive way to achieve this status. It is evident that a values and cultural conflict has emerged.

So why has the Macedonian Community embraced gambling?

In this paper we will attempt to draw links to possible causal factors from a wider socio-economic and historical context. These are not to be seen in isolation but closely interwoven. We are not looking at the individual but the community, the cultural heritage behind the community.

In order to explore these issues we will use the following definition of gambling:

“… to play a game for money or property, to bet on an uncertain outcome, to stake something on a contingency, to take a chance”
(Merriam-Webster's Dictionary)

**Historical Factors**

Perhaps part of the answer to our question lies in the past, when Macedonia was under foreign occupation for centuries, owing to its strategic geographical position. (Central Balkan)

After Alexander of Macedonia (336-323BC), Macedonia fell under the Roman Empire and later under the Byzantine Empire. ‘The mass settlement of the Slaves in the 6th century AD led to a swift assimilation of the ancient Macedonian population by the newly-arrived tribes, and to huge changes in the region’s ethnic composition’ (Makedonski Iselenicki Almanah, 1997, p.30).

At the end of the 14th century, Macedonia fell under the Turkish Ottoman Empire. (1392-1912) The Turks ruled in Macedonia for over 500 years. The Turkish religion, language and culture were very different to the Macedonian people. But the Macedonians survived as a separate nation and cultural identity. Macedonians did not assimilate during that time.

The strength and drive to survive as one nation and culture over centuries in the face of adversity gives testament to the depth of the cultural heritage of the Macedonian people.

At the beginning of the 20th Century Macedonia was geographically and ideologically torn apart by the neighbourhood countries during the Balkan Wars (1912-1913). It was in this period where brothers were pitted against brothers, gambling with their destiny and their life was a daily occurrence.

Perhaps the experiences and insecurities of everyday life of the ancestral Macedonians have left an imprint on the human psyche, and may have, over generations led the Macedonian Community to develop a predisposition to take risks, in search of security in life. 'Material Happiness', the acquisition of material possessions and the power that money brings is sought after within the community. Gambling is playing with your chances. In the past to survive, at present in Australia, setting aside traditional values to win money and improve the quality of life in the search for 'material happiness'. This quest for material happiness is driven to compensate for the lack of the social and spiritual connectedness experienced by Macedonian’s in Australia.

**Migration and Settlement**

Migration occurs for a multitude of reasons however Macedonians have mainly migrated for political and economic reasons. ‘Over the past 100 years Macedonians emigration has mirrored and coincided with the political unrest and economic hardship that has devastated and afflicted much of the region of Macedonia. It took the form of either forced displacement or voluntary migration’ (History, Culture and Service Needs of Macedonians, 2000). This has resulted in large populations of Macedonians living in Canada, USA, Australia and Western Europe.

**Waves of Migration**

There are 5 major migration waves to Australia. The first 3 are mainly Macedonians from Greece (Aegean Macedonia) and the last 2 from today’s Republic of Macedonia. The following categorization is adapted from the Macedonians in Victoria - Community Profile.

1: Early 20th century. (Following the Ilinden Uprising 1903, the Balkan Wars 1912-1913 and WWI (1914-1918). These migrants were predominantly men, itinerant workers- Pechalbari-, largely illiterate and unskilled.
2: Around 1930's. When wives and children have joined the pechalbari, and settled in a new country. The first Macedonian settlers in Australia.

3: Post WW2: The Second World War (1939-1945) and the Greek Civil War (1946-1949) have influenced the third migration wave.

4: Chain Migration from Socialist Republic of Macedonia (Yugoslavia)-1960-early 70's. Macedonia was the poorest republic in the Yugoslav federation. Economic reasons.

5: The fifth Wave:1980’s -1990’s. Just before and following the break up of Yugoslavia. These migrants are mainly skilled, educated, independent or family sponsored. Political and economic reasons.

Migrants have undertaken huge risks in leaving their homeland. From a small country, even smaller villages, where everyone knew each other, daily life progressed at a slower pace and there was time to socialize, leaving this to go for the big unknown country.

Experiences of migration, separation, divided families have all left scars on the soul. Here in Australia people have found work, saved and gained 'material happiness' however, the old homeland social life and culture still yearns.

Happiness and contentment in the life of a Macedonian is the balance between "good health and warm bread’ and 'social and spiritual well-being'.

The social and spiritual component of life in Australia is often not available to Macedonian Community. This coupled with the need to belong makes gaming venues seem attractive as they seemingly offer a substitute. Settlement issues such as employment, education, language, housing, entertainment, isolation, boredom, frustration, different value system, different family structures, lack of support of the extended family, lack of role models, empty nest syndrome have all impacted on the disposition of the Macedonian Community to accept and tolerate the gambling phenomenon. 'Participation in gambling activities is a manifestation of social disconnectedness, life stress and trauma' (Healthy Wealthy and Wise Women).

Conclusion

The Macedonian Community is a very close knit, intensely proud and private community, jealously guarding their cultural heritage, language and religion. Problems such as gambling are not openly discussed.

In the past Kildonan has looked to community education and networking with the established clubs and groups to develop strategies to address issues. With the assistance of Macedonian Community leaders and workers we have identified linkages with the past and the issues faced by the migrant in their adopted locale. This agency has actively supported fund-raising initiatives and the establishment of new recreational and social groups.

Gambling, problem gambling is particularly destructive to this community. In identifying issues our agency has looked to further develop its partnership within the community. This will be the foundation for future work and partnerships with this intensely private community, which is only just beginning to accept the assistance of agencies outside their own cultural network.
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Appendices

Appendix 1. Community Perspectives

In order to develop this paper we sought input from the Macedonian Community leaders and community workers. Interviews were conducted with first and second-generation migrants. Profiles of those interviewed:

- President of the Macedonian Orthodox Community of Melbourne and Victoria
- News editor of a Macedonian newspaper
- President of a Macedonian Senior Citizen Club with over 500 members
- President and the past president of the Macedonian Welfare Workers Network
- Macedonian Community workers,
- Problem gambling counsellors
- Settlement workers
- Community worker at the Victorian Transcultural Psychiatry Unit
- Health promotions Officer, Community Health Centre

The following includes questions relevant to this paper and a brief summary of responses:

1. Explain what you think gambling is?
   - A game of chance to gain money
   - Entertainment
   - Catastrophe for families
   - Engaging in an activity such as pokies and lotteries in an uncontrolled way
   - Playing with your life and money in truth playing with families and children
   - Looks like a prospect for the future but it a trap
   - A huge pleasure if controlled
   - A way to avoid reality

2. What is problem gambling?

- Gamble beyond your resources to the detriment of your relationship with people
- No distinction between gambling and problem gambling
- When no longer fun
- When you say good morning and off to the pokies
- No control, wish to win easy money, borrowing money, chasing losses

3. In your opinion do you think the Macedonian Community has accepted gambling?

Unanimous agreement from respondents.

- Only some forms - tattslotto, pokies, bingo. Tattslotto is very easy to play, cheaper and fixed cost. Horses are not popular as a good grasp of the language is required
- As entertainment, there is nothing else to do, especially for the elderly; clubs don't have a range of activities. Free food also appeals to the Macedonian sense of community.
- Venues offer attractive incentive such as – having a $1 meal or free meal
- A way for the Senior Citizen Clubs to raise money for their activities (casino sponsored trips)
• The society (capitalism) has done this to take people (migrants) money from their pockets, ‘they couldn't have done a better job’
• Accepted and encouraged by government - 'Government blessing'
• Traditionally Macedonians have negative attitudes towards people who gamble
• Macedonians are living in a profit driven society where gambling is widely accepted, glamorous and very attractive
• It is a way to escape under lying problems
• If language is a barrier then acceptance and a sense of belonging can be achieved in the venues

4. Macedonian's are hard working, family orientated and have a culture of saving. In your opinion has gambling influenced the Macedonian Traditional Culture and value structure?

A general consensus, that gambling does not fit comfortably within traditional Macedonian Culture.

• To a degree gambling is compatible, if the objective of gambling is to win and the culture is about saving money
• Migrants have big expectations, if they do not reach them they look for other options
• Does not fit in our culture. Traditionally we did not know about gambling. We have suffered a lot through history to survive, we did not have time to play games for fun
• Gambling has effected the whole world not just Macedonian’s
• Traditionally there is a difference in the roles for men and women, gambling does not distinguish - ' in Australia 90% of females are men'
• Traditional values slowly diminishing, less togetherness more individuality
• Younger generation assimilating and accepting new ways quicker thinking they are better

5. In your opinion who is gambling more? 1st or 2nd Generation Migrants?

The majority of responses indicated that in their opinion the 1st generation is gambling more.

• Every generation gambles for different reasons
• 1st generation - they have worked hard to establish themselves, many have come from poor regions, little fun in their youth and now have money and want to make up for lost time
• 2nd generation - better economic status, good English, better paid jobs, more money more discretionary spending
• 2nd generation - has the financial support from the family and can afford to throw money away
• 2nd generation more problems with drugs and alcohol