

Key Indicators of the Transition from Social to Problem Gambling

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Abstract At the International Gambling Conference: Policy, Practice and Research in 2004 (Clarke, *eCommunity-International Journal of Mental Health and Addiction*, 3:29–40, 2005), a paper was presented which proposed key indicators of the transition from social to problem gambling and to recovery, based on a review of literature on factors leading to substance abuse. They included availability of gambling activities, lack of social and cultural empowerment, low socioeconomic status, and personal loss of control. Subsequently, a multidisciplinary team collected data on why people gamble. Four New Zealand ethnic groups (Pākehā/New Zealand European, Māori, Pacific peoples and Asians) in South Auckland were targeted for both phases of the study. Phase 1 involved qualitative analysis of data from individual interviews and focus groups. Phase 2 surveyed 345 adults using a questionnaire developed from the first phase. From both phases, key indicators for problem gambling were similar to the indicators for substance abuse. Public health interventions such as reducing access to electronic gaming machines and empowerment of cultural groups, and a longitudinal study of the development of gambling in the community are suggested.

Keywords Transition from social to problem gambling · Problem gambling · Substance abuse · Public health in New Zealand

Introduction

While there is much international epidemiological prevalence research on problem gambling, there is a universal lack of information relating to the incidence of problem gambling which

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refers to new cases of a disorder or problem that develop during a specified period of time. Consequently little is known about the determinants that influence the shift from recreational/social gambling to problem gambling.

A large proportion of the population in New Zealand gambles regularly with no adverse consequences, but for a large number of individuals, gambling is a problem. Estimates conservatively suggest that between 15,400 and 30,700 adults are currently problem gamblers in New Zealand, with a further 7,300 to 20,100 being current probable pathological gamblers (Abbott & Volberg, 2000). These individuals spend proportionately a great deal more than others, with approximately 1.3% of the population being responsible for approximately 19% of total expenditure. This can lead to a number of negative consequences for affected individuals, their families, employers, colleagues at work and the communities in which they live (Brown & Raeburn, 2001; Darbyshire, Oster, & Carrig, 2001; Willans, 1996). Ethnic diversity is also important in this regard, particularly so in New Zealand where Māori, Pacific peoples and some recent migrant groups are at high risk and account for over half of the country's problem gamblers (Abbott & Volberg, 2000).

Despite the extent of problem gambling, there is little international research which examines the onset of this type of behaviour. With the exception of studies by Abbott, Williams, & Volberg (1999, 2004), there appear to be no published prospective gambling studies examining the onset of problem gambling behaviour in general populations. Because there is scant research on the incidence of problem gambling, little is known definitively about the determinants that propel or trigger the shift from non-problem to problem gambling in particular individuals, communities or population groups (Adams, 2002; Hodgins, 2001).

While associated with problem gambling development, relatively little is known about the role of family factors—genetic, socio-cultural and social learning—in problem development. The role of external socialising agencies, for example, media, advertising, peer groups and workmates, is little investigated but may be particularly important, especially for groups such as Pacific peoples and some categories of recent migrants that had little or no gambling involvement in their families of origin. Community concerns about social impacts of gambling and the level of advertising activities have been mentioned in a number of reports (e.g., Rankine & Haigh, 2003). According to these reports, different population groups, for example, indigenous people and people in low socioeconomic areas, are drawn to gambling activities.

As New Zealand residents have no control over the sale of alcohol in local supermarkets, they also have no choice about the location of gaming machines in arcades, clubs and pubs. Research has shown that: (1) there is higher exposure to gambling, particularly gaming machines, in low incomes areas; (2) Māori women are the fastest growing population presenting to treatment services; and (3) residents of less affluent areas participate in gambling activities at a higher level than those in more affluent areas (GamblingWatch, 2003; Rankine & Haigh, 2003). Discerning the factors which are related to the incidence of problem gambling is a prerequisite to the design of effective public health interventions including prevention and harm minimisation strategies (DiClemente, Story, & Murray, 2000; Robson, Edwards, Smith, & Colman, 2002).

Prospective Studies

Abbott et al. (1999, 2004) conducted the first general population prospective study of people with problem and non-problem gambling. Seventy-seven people with problem gambling and 66 people with regular non-problem gambling were reassessed 7 years after

their initial assessment as part of the 1991 New Zealand national gambling prevalence survey. The major finding was that although none of the people with problem gambling received specialist help, the majority no longer reported problems when re-assessed. Initial problem gambling severity, preference for track betting and co-morbid excessive alcohol use predicted future problems. A significant number of people with problem gambling who no longer reported gambling problems engaged in excessive or problematic alcohol use. Many of the non-problem gamblers participated weekly or more frequently in continuous gambling activities, but too few subsequently developed gambling problems to assess the incidence of problem gambling or to identify predictors of initial problem onset.

Canadian research (Wiebe, Cox, & Falkowski-Ham, 2003a; Wiebe, Single, & Falkowski-Ham, 2003b) has also reassessed people with non-problem and problem gambling who took part in a general population prevalence study. Although re-assessment took place only 12 months after the baseline assessment, most people who had problems either no longer reported them or indicated that they were less severe. In contrast to the earlier New Zealand investigation (Abbott et al., 1999), the Canadian study included sufficient numbers of people with non-problem gambling as well as at-risk participants who subsequently developed problems to assess incidence. Although it was found that emotional stress, loneliness and social factors were significantly associated with problem gambling at the 12 month assessment, unfortunately these factors were only measured at follow-up, not prospectively. Consequently, it is not known whether they preceded and played a role in the transition to problem gambling or were a consequence of problem gambling.

A number of prospective studies with adolescents and adults have explored some factors as predictors of problem gambling (Abbott et al., 2004; Shaffer & Hall, 2002; Slutske, Jackson, & Sher, 2003; Wiebe et al., 2003b). For example, 305 adolescents were assessed at three different times as they progressed toward young adulthood (Winters, Stinchfield, Botzet, & Anderson, 2002; Winters, Stinchfield, Botzet, & Slutske, 2005). Parental gambling history, delinquency, school problems and substance abuse during adolescence were significant predictors of early adult problem gambling, similar to the predictors for substance abuse. While betting on card games and sports significantly decreased, machine gambling significantly increased from 12% at Time 1 to 58% at Time 3.

Problem Gambling and Forms of Gambling

A significant body of international and local research indicates that some types of gambling are much more strongly associated with problem gambling than others (Abbott & Volberg, 1999, 2000; Productivity Commission, 1999; Shaffer, Hall, & Vander Bilt, 1997; Walker, 1992; Wildman, 1998; Volberg, 2001; Volberg & Abbott, 1994). This is an important reason for considering different forms of gambling separately. A number of conceptual frameworks have been developed to group together gambling activities that possess common attributes and differentiate them from other forms. Those most widely used and relevant to problem gambling include event frequency and skill-luck dimensions.

Some forms of continuous gambling, for example, electronic gaming machines, involve very rapid cycles of stake, play, determination of outcome and opportunity to reinvest. Others (non-continuous) do not permit repeated re-engagement within a short time-span and are located at the opposite end of the event frequency dimension or continuum (Abbott & Volberg, 1992; Dickerson, 1993; Griffiths, 1999). Lotto and most forms of lottery are in this category. A number of continuous forms have been shown to have strong associations with problem gambling. Electronic gaming machine participation is particularly notable in this regard.

For example, in a study of 44 adult pathological gamblers, Breen & Zimmerman (2002) examined the time elapsed between the age of regular gambling at their primary activity and the age at which DSM-IV criteria were first met. On average, pathological gamblers who gambled primarily on machines met the criteria 1.08 years later, while those who bet primarily on traditional activities such as sports, horses or cards, met the criteria 3.58 years later. The onset of pathological gambling began at a later age for women than for men, but they were more likely to be gaming machine players than men at the onset.

Gambling activities also vary with respect to the degree of skill involved. Forms such as track betting and card games that involve an element of skill are attractive to a number of “serious gamblers” (Walker, 1992) and linked to problem gambling (Hunter, 1990; Abbott, 1999; Abbott & Volberg, 2000). Hunter (1990) argues that the most addictive forms of gambling involve enough skill to allow a minor influence on outcome, but not enough for it to be in the gambler’s favour.

This skill-luck dimension is complicated by the finding that, in addition to the actual level of skill that may be exercised, many gamblers have inflated beliefs about the extent to which they can influence outcomes (Toneatto, 1999; Walker, 1992). Significant numbers of gamblers believe that they can influence activities that are driven entirely by chance, for example, lotteries and electronic gaming machine outcomes. Furthermore, particular design features, aspects of gambling settings/venues and advertising are directed toward fostering participants’ illusions of skill. Perceived skill may be as important, if not more important, than actual skill in the development of gambling problems.

Substance Abuse and Gambling

Many studies have found that youth and adults with problem gambling in community and clinical settings drink alcohol and consume illicit substances at several times the general population rates (e.g., Abbott, 2001; Gupta & Derevenski, 1998, 2000). Surveys indicate that a high percentage of regular gamblers consume alcohol while gambling and that this may be especially so during electronic gaming machine participation (Stewart & Kushner, 2003).

Typically 30–50% of adults seeking treatment for pathological gambling have co-morbid alcohol and/or other substance misuse disorders (Crockford & el-Guebaly, 1998; Petry, 2002). Potenza et al. (2003) found helpline callers who had co-morbid alcohol problems experienced more serious gambling and related problems than other callers with problem gambling. These and other findings suggest this group might have more impaired impulse control. Again, lack of prospective research leaves unresolved whether this is the case and, if so, to what extent it is a consequence of pre-existing genetic, personality and/or other factors rather than secondary to excessive alcohol consumption.

Experimental studies where alcohol was given to participants prior to or during gambling indicates that alcohol increases risk-taking and, in the case of people with problem gambling, leads to longer gambling sessions (Ellery, Stewart, Loba, & Klein, 2003). This suggests that alcohol consumption, probably on the part of both problem and non-problem drinkers, may contribute to the development and maintenance of problem gambling. In the first prospective general population study of people with problem gambling (Abbott et al., 1999, 2004), alcohol misuse predicted a continuation of gambling problems 7 years later, even when problem gambling severity and other risk factors were controlled statistically. While not specifically addressing the role of alcohol in the development of problem gambling, these findings implicate heavy alcohol use in the continuation of problems and relapse.

Welte, Barnes, Wieczorek, Tidwell, & Parker (2004) examined the extent to which relationships between socio-demographic factors and problem gambling are mediated by gambling participation. They found that alcohol misuse and dependence was strongly linked to problem gambling and that this relationship remained when gambling behaviours were held constant and current alcohol and drug use, drug misuse/dependence and criminal offending were incorporated into the analysis. Membership of particular ethnic minority groups such as indigenous populations, and low socioeconomic status were strong predictors after all of the preceding factors were taken into account.

The Present Study

In 2004, the Health Research Council (HRC) of New Zealand awarded a grant to the present authors to develop a methodology for examining why people gamble in New Zealand (Tse et al., 2005). Part of the study involved a review of the literature on the cultural, sociodemographic, social and personal factors that contribute to the initiation and continuation of the use of addictive substances, and on the interrelationships between problem gambling and substance abuse (Clarke, 2005). It was suggested that risk and protective factors associated with substance abuse could apply also to problem gambling. Past research has suggested a broad range of personal, social and environmental factors are vital to an overall understanding of the progression from non-problem gambling to problem gambling in New Zealand (Abbott et al., 1999, 2004; Adams, 2002). In general, it was proposed that social, cultural, situational and environmental factors are likely to be more influential than personal factors in the initiation to gambling, while personal factors are more likely to influence the continuation with frequent gambling towards problem gambling.

The purpose of the present paper is to compare key indicators of the development of substance abuse with key indicators of the transition from starting gambling to problem gambling, which were abstracted from interviews, focus groups and a survey of gamblers in the Auckland area. It provides a synopsis of the main findings of the project regarding the key indicators, which were grouped into economic, Personal, Recruitment, Environment, Social and Spiritual (Cultural) factors—the e-PRESS framework developed for this study.

Three research questions were asked: (1) What key indicators are associated with reasons why people start gambling? (2) What key indicators are associated with reasons why people continue gambling regularly and shift from social to problem gambling? (3) How do these key indicators differ among ethnic groups in New Zealand?

Materials and Methods

For each phase of the project, ethics approval was obtained from the University of Auckland Human Participants Ethics Committee. In order for such a methodology to be an effective means to evaluate environmental influences on gambling, the research team adopted a public health approach (Korn & Shaffer, 1999; Volberg, 1994). Such an approach sees gambling not only as a product of biological and behavioural dimensions, but as a product of broader population-level factors, such as income, deprivation, employment and poverty (Korn & Shaffer, 2002).

Phase 1

The first stage of this phase was a systematic literature review to identify studies relevant to the shift between social and problem gambling. It covered major literature databases such

as *PsycINFO* and *Medline*, web-based searches for unpublished research, and contact with authors of previous studies on gambling. The second stage consisted of individual interviews with problem gamblers ($n = 45$), and professionals working with problem gamblers and family members affected by problem gambling ($n = 61$). It also gathered data from focus groups of mixed social and problem gamblers ($n = 53$), and of professionals and family members ($n = 27$). The participants selected were broadly representative of both sexes and the four main population groups in New Zealand: New Zealand European, Māori, Pacific Island (Niue, Samoan, Tongan and Cook Islands), and migrants from the Southeast Asian region residing in New Zealand for less than 10 years. Two questions relevant to the present investigation were asked: (1) Why do people start gambling? (2) How do people shift from social to problem gambling? In order to maintain transparency in the data analysis and provide an audit trail, all qualitative data were analysed using QSR N6 (2002). Tables 1 and 2 show the themes and sub-themes derived from the analysis.

The third stage involved the development of a methodology in the form of a questionnaire to assess the determinants of the transition from starting gambling to continuing gambling at the individual, social and environmental levels, based on the findings obtained from the first two stages. From the themes identified in the first two stages, the authors in consultation with panels of experts listed 20 reasons for starting gambling (e.g., “Friends and family introduced me to gambling.”) and 15 reasons for continuing gambling (e.g., “I lost control of myself.”). Each reason was rated on a five-point Likert-type scale (0 = “Does not apply to me at all,” 1 = “Applies to me a little,” 2 = “Applies to me generally,” 3 = “Applies to me a lot,” 4 = “Very definitely applies to me”). The questionnaire asked participants to specify their favourite type of gambling and to indicate whether they gambled once a week or more. In addition to demographic questions about sex, age, ethnicity and occupation, there were questions to ascertain current (12 months) probable pathological gambling status according to DSM-IV criteria, whether a respondent felt gambling was a problem or not, and what changes there were in gambling activities.

Phase 2

To test the validity and usefulness of the questionnaire in a specific community location, it was administered to a convenience sample of gamblers who were recruited from a variety of sources including training/education institutions, cultural groups, social service agencies, sports groups and clubs, and through individual networks in the South Auckland area. The area was chosen as there were several other ongoing gambling research projects in the area and it provides the cultural diversity necessary to ensure that the methods were appropriate for different cultural groups. National surveys have also identified Auckland as an area of high gambling prevalence, even after other factors are controlled for statistically (Abbott & Volberg, 2000). South Auckland has a high number of gambling opportunities that have been established for some time, including “pokies bars” (electronic gaming machines) and racing facilities, which allowed the explicit examination of different types of gambling behaviours in the pilot test.

To validate the key indicators from Phase 1, frequencies of problem gambling status, favourite games, reasons for starting and continuing gambling, and changes from first to current form of gambling were tabulated for the sex, age, ethnic and occupational groups, using SPSS 11.0 (2003).

Participants

The final sample consisted of 345 adults and descendants of four ethnic population groups in New Zealand (Pākehā/New Zealand European, Māori, Pacific Islands and Asian).

Table 1 Themes and Sub-Themes in the e-PRESS Framework for Why People Start Gambling—Phase 1

	Themes (in bold) and Sub-themes	Issues for Specific Population Groups
economic (e)	<p>Win money</p> <p>Close to win</p>	<p>For some Māori: gamble for socio-economic reason, for money to meet the needs</p> <p>For some Pacific peoples: gamble for money to help their family, pay bills and obligations; “catch up with the rest of society”</p> <p>For some Asians: gamble for “easy money” especially for people who are not in workforce or under-employed</p>
Personal (P) (and individual factors)	<p>Seek excitement Do it for fun, try out new activities Take risk, do it for the thrill/challenge</p> <p>Minimise negative affect Reduce boredom</p> <p>Escape from depression, negative mood or grieving Avoid interacting with people Release stress Cope with unemployment Avoid loneliness A form of self-reward</p>	<p>For some Pākehā: use gambling as a form of coping with stress and boredom; alcohol influences gambling behaviours; are attracted by advertising material</p> <p>For some Māori: stressful city living style in modern New Zealand</p> <p>For some Asians: cope with post-immigration adjustment difficulties; have access to cash (cash investment, as part of immigration requirement); gambling is a new, legalised experience in New Zealand</p>
Recruitment (R)/ Environment (E)	<p>Attractive prizes</p> <p>Target specific groups Promotional/advertising activities targeted specific ethnic or community groups (for example, young people, elderly)</p> <p>The 4As Advertising on TV, newspaper and radio Availability of gambling activities Accessibility to gambling venues Abundance in terms of various forms of gambling activities</p> <p>Friendly gambling product Machines/games are easy to learn, to play Caters for different skills levels</p>	<p>For some Māori and Pacific peoples: are targeted in terms of high concentration of pokie machines in low socio-economic areas</p> <p>For some Māori: celebratory venues have gambling activities, pub and club where people drink can also gamble</p> <p>For some Asians: gambling venues in particular casinos, are attractive environment</p>
Social (S)/ Spiritual (S) (or religious)	<p>Gambling is a learned behaviour</p> <p>Family and peers influences</p> <p>Family initiates and normalises gambling</p> <p>Introduced by workmates, family and friends</p>	<p>For some Pākehā: influenced by family and peers</p> <p>For some Māori: generational trend, passing down, young children are taught to gamble</p> <p>For some Pacific peoples: gambling activities are accepted as part of fundraising efforts for churches and ethnic communities</p> <p>For some Asians: friends and family take new comers or visitors to gamble when they first arrive; gambling venue is a place to meet other Asian people</p>

Table 2 Themes and Sub-Themes in the e-PRESS Framework for Why People Shift from Social to Problem Gambling—Phase 1

	Themes (in bold) and Sub-themes	Issues for Specific Population Groups
economic (e)	<p>Have winning experiences</p> <p>Urge to win or belief to win</p> <p>Use gambling to solve money problems</p> <p>Recoup the losses</p>	<p>For some Pākehā: gamble to recoup losses</p> <p>For some Pacific peoples: increased exposures to wealth drive them to gamble heavily; they gamble at intense levels to meet traditional and familial obligations to family (close, extended and non-blood links), village, church</p>
Personal (P) (and individual factors)	<p>Minimise negative affect</p> <p>Release stress</p> <p>Reduce constant boredom</p> <p>Cope with anger</p> <p>Escape from problems</p> <p>Cope with unemployment</p> <p>Have unpleasant changes in life circumstances</p> <p>Have no Pākehā direction in life</p> <p>Enjoy gambling</p> <p>Are comfortable with the gambling environment</p> <p>Loss of control</p> <p>Some personalities are vulnerable to problem gambling</p>	<p>For some Pākehā: gamble to cope with stress and emotional problems</p> <p>For some Asians: related to work related life-style (for example, finish work at late night, or have mid-day breaks)</p>
Recruitment (R)/ Environment (E)	<p>Family and peers influences</p> <p>Reinforced by advertising</p> <p>Gambling environment</p> <p>Some gambling activities are addictive</p> <p>Gambling environment is glamorous, attractive and relatively safe (for example, for women)</p> <p>Close to banks, money machines and finance companies</p> <p>Easy access to gambling outlets</p> <p>New gambling products</p> <p>Surging of Internet gambling and soaring in number of pokie machines</p> <p>Gambling is part of the community; both gambling industry and community benefits from it</p>	<p>For some Pākehā: are influenced by advertising; having easy access to money machines and gambling activities</p> <p>For some Asians: gambling venues are very welcoming and sensitive to their needs</p>
Social (S)/ Spiritual (S) (or religious)	<p>Peer reinforcement for people with problem gambling</p> <p>Money lending within whānau sustains high level of gambling</p> <p>People with problem gambling “support” each other’s gambling behaviours</p>	<p>For some Māori: gambling becomes part of community/social activity for example, gambling activities in marae</p> <p>For some Samoan people: breakdown in communications within a family allows gambling problems to go undetected</p>

Respondents were approached individually in various settings in South Auckland. To ensure input from various groups, the researchers selected individuals according to sex, age and ethnicity. The researchers involved in the selection of the individuals were trained Pākehā, Māori, Pacific and Chinese interviewers who worked on the second stage of the project. Table 3 shows the characteristics of the sample.

Compared with the 2001 census population for the South Auckland district (New Zealand Government Department of Statistics, 2001), there were proportionately more females (65 vs. 51%) and fewer males (34 vs. 49%), $\chi^2 = 8.43$, $p < 0.01$. The proportions of Pacific Islands (34%) and Asian (23%) groups were higher than the census population (22 and 13%, respectively), $\chi^2 = 12.78$, $p < 0.01$. Ages ranged from 14 to 81 years, with an average age of 39.51 (SD = 12.84) years. The oldest age group (50+) was under-represented (21 vs. 35%), but the percentages for the other age groups were equivalent to the census data (<29, 23%; 30–39, 22%; 40–49, 21%).

Most of the sample (92%) gambled, 66% gambled regularly (at least weekly), 38% of the gamblers (58% of regular gamblers) met the DSM-IV-TR criteria of five or more symptoms of persistent and recurrent maladaptive gambling behaviours (probable pathological gamblers—PPG), and 28% of the PPG did not think that they had a gambling problem. Participants less than 29 years of age had the highest PPG rate (52%) of all age groups. Pākehā (77%) and Māori (69%) contributed the heaviest weights to probable pathological gambling frequencies. Cook Islands participants (7%) and Asians (14%) contributed the least.

Results

Because the distributions of responses for each of the reasons were highly positively skewed, ratings 0 to 4 were recoded (0 = “Does not apply to me at all,” 1 = “Applies to me at least a little”). For the gamblers in the sample who completed the relevant sections, Tables 4 and 5 show the percentages of the sub-samples who endorsed each reason applying at least a little, by ethnicity and the e-PRESS framework. The results presented below consist of an amalgamation of the findings from both phases of the project, in comparison to the key indicators for the development of substance abuse.

Table 3 Characteristics of the South Auckland sample in Phase 2 ($n = 345$)

Sex	Ethnicity
Males (35%)	Pakeha (20%)
Females (65%)	Maori (18%)
Age (years)	Pacific Island (34%)
14–29 (21%)	Asian (23%)
30–39 (34%)	Occupation
40–49 (22%)	Unemployed (15%)
50–81 (21%)	Student (9%)
Gambling	Homemaker (15%)
Gamblers (92%)	Office/clerical (19%)
Regular (weekly) gamblers (66%) ^a	Manual/factory (14%)
Probable pathological gamblers (38%) ^a	Professional/managerial (19%)
Non-admitters (28%) ^b	

^a Percentage of gamblers.

^b Percentage of DSM-IV-TR probable pathological gamblers.

Table 4 Percentages of Ethnic Groups Endorsing Reasons for Starting Gambling

	Pākehā	Māori	Cook Island	Niue	Samoan	Tongan	Asian
<i>n</i> =	53	62	27	22	30	30	71
Economic (e)							
I hoped to win some big money	98	100	93	86	100	83	78
I needed to solve my money problems	85	89	82	81	93	80	51
I needed money for my family	83	75	78	68	90	93	38
I needed money to fulfil my obligations	76	54	74	55	87	80	36
Personal (P)							
I looked for excitement and entertainment	93	92	89	82	83	93	70
I saw gambling as a form of reward	94	84	81	64	80	57	59
Gambling is one of my few entertainment options	91	92	82	73	97	100	57
I used gambling to escape from my stress and troubles	89	87	7	32	33	30	44
I needed time out	83	87	11	41	57	41	77
I wanted to get rid of my boredom	81	84	59	59	83	93	41
I had a lot of spare time	81	82	11	32	55	50	58
Gambling helped me deal with my loneliness	76	72	7	24	35	23	40
Recruitment (R)/Environment (E)							
The places I socialise have gambling facilities	91	93	82	77	90	93	46
Advertisements encouraged me to think I could win	89	80	44	50	38	37	61
I got involved in fund-raising	83	69	22	41	53	43	54
Lowered drinking age increased my exposure to gambling	4	23	4	14	10	13	27
Social (S)/Spiritual (S)							
It was a form of socialising	93	86	78	82	80	100	52
Friends and family introduced me to gambling	90	83	78	68	77	77	43
It began with a social activity	87	95	81	64	93	93	61
Migration and associated difficulties initiated my gambling	2	15	4	27	7	7	36

For all reasons, $\chi^2 (6, n = 295) > 16.81, p < 0.01$.

Economic (e)

From the review of literature on substance abuse (Clarke, 2005), low socioeconomic status (poverty, unemployment, poor housing) seemed to be the major key indicator in the transition from social to heavy alcohol consumption. Economic themes related to low socioeconomic status from Phase 1 of the current study included urges or beliefs to win big money, solve money problems and recoup the losses. For some Pacific peoples, increased exposure to wealth in New Zealand compared to poverty in the islands drives them to gamble heavily. They gamble at intense levels to meet traditional obligations to remit money to extended families, island villages, and churches.

In Phase 2, hoping to win money predominated across all demographic groups for starting and continuing gambling. Solving money problems which becomes needing money to cover losses was also relatively important in the transition for all ethnic groups, except for Asians (51 and 46%, respectively, for each reason). Obligations and the need for money for family predominated among Samoans and Tongans (80–93%) for starting gambling,

Table 5 Percentages of Ethnic Groups Endorsing Reasons for Continuing Regular Gambling

	Pākehā	Māori	Cook Island	Niue	Samoan	Tongan	Asian
<i>n</i> =	49	52	21	18	27	27	37
economic (e)							
I want big wins	98	98	95	89	100	85	61
I need the money to cover what I lost	94	92	76	50	89	82	46
Personal (P)							
Gambling helps me escape from my stress and troubles	94	96	5	11	33	30	58
Small wins encourage me to keep gambling	94	98	81	89	96	93	57
Gambling helps me get rid of my boredom	90	90	71	50	74	74	50
Gambling gives me hope and opportunity for a better life	92	83	81	56	89	85	51
I lose control of myself	88	89	48	28	56	73	31
I have a lot of free time	88	94	14	22	56	46	62
Recruitment (R)/Environment (E)							
I have easy access to money machines	98	94	91	71	96	85	56
I like the sound and excitement of gaming venues	96	85	48	50	73	89	40
I have easy access to gambling activities	92	98	76	78	100	92	50
One of the few activities that I can do outside of work	85	85	19	56	62	44	47
Social (S)/Spiritual (S)							
I enjoy being with people in gambling venues	96	92	24	39	56	48	54
My friends, workmates or family invite me to gamble	92	79	52	39	77	44	50
I gamble to “save face” with my friends/family/colleagues	83	46	0	17	15	19	35

For all reasons, χ^2 (6, *n* = 231) > 16.81, *p* < 0.01.

less so for Māori, Niues and Asians (36–75%). Needing money to cover gambling losses was frequently rated by Samoans (89%) and Tongans (82%) for continuing gambling. Continued gambling for hope and the opportunity for a better life was not highly rated by Niues (56%) and Asians (51%), but was by Samoans (89%) and the other ethnic groups (81–92%).

Personal (P)

Loss of control and reduction of negative affect were clear indicators of transition for substance abuse, and for problem gambling in Phase 1 and continuing gambling in Phase 2. Negative affect includes relieving stress, reducing constant boredom, coping with anger, escaping from problems, coping with unemployment, and having unpleasant changes in life circumstances. In Phase 1 enjoying the gambling environment was also a key indicator. Some Māori and Pacific Island people felt that they had no Pākehā direction in life. For some Asians, it was work-related lifestyle such as shift work with nothing to do afterwards.

In Phase 2, seeking excitement and entertainment predominated across all ethnic groups for starting gambling. Gambling as a way to escape from stress, troubles and loneliness was especially salient for Pākehā and Māori to start gambling (72–89%), and more salient for continuing gambling, (94 and 96%, respectively). Starting gambling to deal with loneliness

was not strongly supported by the Pacific groups (7–33%), in comparison with Pākehā (76%) and Māori (72%). Needing time-out and having a lot of spare time were not as important for the Cook Island group (11% for each reason) as for the other ethnic groups. Losing control was admitted by Pākehā (88%) and Māori (89%), and by Tongans (73%). All ethnic groups, except Asians (57%), strongly admitted that small wins encouraged them to continue gambling (81–96%).

Recruitment (R)/Environment (E)

Ease of access and advertising were the key indicators for substance abuse. In Phase 1, themes included: advertising reinforces thinking of winning and makes new gambling products attractive; the gambling environment is glamorous, attractive and relatively safe (e.g., for women); venues are close to banks, money machines and finance companies; access to gambling outlets is easy, including increases in Internet gambling and number of electronic gaming machines; and, the perception that both the gambling industry and community benefit from high rates of gambling. Most of the respondents could recall details of the advertisements in media. They were impressed by the amount of prizes and some participants said they have been actively “recruited” or targeted by the gambling related promotional/advertising activities.

In Phase 2, the most important reason for starting and continuing gambling for all ethnic groups was the availability of gambling facilities (usually electronic gaming machines) in places of socialising. Advertisements for casino and internet games played a major role in attracting young people (75%), Pākehā (89%), Māori (80%), and students (79%; data not tabled). Proliferation of gaming and money machines was also frequently endorsed. Probable pathological gamblers, especially women, were likely to have started playing gaming machines, housie (bingo) or card games, but to continue on gaming machines (data not shown). Getting involved in fundraising was more prominent among Pākehā (83%) and Māori (69%) than among the Pacific Island and Asian groups (22–54%).

Social (S)/Cultural/Spiritual (S)

Like substance use, gambling was initiated, normalized and reinforced by family and peers (Phase 1). For some Māori and Pacific Island peoples, gambling activities are accepted as part of fundraising for churches and ethnic communities. Some Samoan people attributed a breakdown in communications within a family that allows gambling problems to go undetected. Money lending within extended families sustains high levels of gambling. Problem gamblers reinforce and pressure one another to heavier gambling.

In Phase 2, friends and family introducing one to gambling had the lowest frequency for Asians (43%) in comparison to all other ethnic occupational groups (68–90%). Pacific Islands’ gamblers were more likely to start for social reasons than for personal ones, including obligations and influence of family and friends. The regular gamblers among them were more likely to continue gambling for personal reasons. Pākehā were more likely than the other ethnic groups to continue gambling by accepting invitations from friends, family or colleagues (92%).

Confirming the findings from the interviews and focus groups in Phase 1, migration and associated difficulties were relatively important for Asians starting gambling (36%), in comparison to the other ethnic groups (2–27%). Saving face with friends, family or colleagues was relatively important for them to continue gambling (35%). None of the Cook Islands group and relatively few of the other ethnic groups (15–46%) indicated that

they gambled to save face with friends/family/colleagues, in contrast to Pākehā (83%). Gambling began as a social activity for many Māori (95%) and enjoying being with people in gambling venues continued to be important for the regular Māori gamblers (96%). Contrary to the responses in Phase 1, gambling in casinos was not frequently endorsed by Asians (data not shown). Also, contrary to what was expected from Phase 1, becoming involved in fundraising, such as at church, was not as important for starting gambling among Pacific peoples (22–54%) as it was among Pākehā (83%) and Māori (69%). While gambling started as a social activity for Samoans (87%), and Tongans (80%), it was not as important for these two groups to continue gambling (56 and 48%, respectively).

Discussion

From Phases 1 and 2 of the present study, the key indicators for the development of problem gambling are comparable to the key indicators for the development of substance abuse (Clarke, 2005). Within the e-PRESS framework, low economic status, reduction of negative affect, loss of control, conducive environments, glamorous advertising and social inducements are relevant to the development of both. Alcohol and substance abuse are clearly specific risk factors for the development of problem gambling (Abbott et al., 1999, 2004; Crockford & el-Guebaly, 1998; Petry, 2002; Potenza et al., 2003; Welte et al., 2004; Winters et al., 2002, 2005). In Phase 2, alcohol seems to have played a part in the initiation of the youngest age group, Māori and Asians into gambling. These three groups had the highest frequencies of agreement that lowered drinking age increased their exposure to gambling.

A number of the key indicators in the present study are consistent with the reports from earlier prospective studies of problem gambling. Social, cultural, situational and environmental reasons seemed to be more important than personal reasons for starting gambling, while personal reasons were proportionately greater for continuing gambling. Personal reasons that predominated were emotional stress and loneliness (Wiebe et al., 2003a,b). For all ethnic groups in the present study, advertising, ease of access to money and gaming machines, and gambling facilities in social venues were seen as strong incentives to start and continue gambling. Electronic gaming machines provide a form of continuous gambling that is especially conducive to problem gambling (Abbott & Volberg, 1992; Dickerson, 1993; Griffiths, 1999). Problem gamblers were more likely to have switched from other forms of gambling to machines (Winters et al., 2002, 2005), and to progress to pathological gambling much faster than gamblers whose primary activities were bets on sports, horses or cards (Breen & Zimmerman, 2002).

The images in advertisements for casino and internet games and their associations with pleasure and social status are more accessible in memory, and will automatically come to mind when decisions are being made without rational thought (Hills & Dickerson, 2002). In addition to their recognition that small wins reinforce continued gambling, the gamblers' illusions of skill and their beliefs that they can influence chance outcomes further reinforces their persistence at activities such as gaming machines (Toneatto, 1999; Walker, 1992).

Even though there were variations in key indicators within ethnic groups, some gambling trajectories beyond common ones discussed above could be postulated for each of the groups. Pākehā or New Zealanders of European extraction and Māori in the sample responded very similarly. Both greatly endorsed most of the reasons for starting and continuing gambling. Lowered drinking age and migration (probably from rural areas to Auckland) affected Māori more than Pākehā.

The trajectories for the different Pacific Island groups were not all similar to one another. Gambling to escape from stress, troubles and loneliness was not a strong factor for starting gambling for all of the groups. Migration and associated difficulties applied only to Niueans. Like Māori, needing money for family and obligations was more relevant for Samoans and Tongans than for the other Pacific Island groups. They began gambling as a social activity which was much less a reason for continuing regular gambling. Tongans were more likely to admit losing control. Surprisingly, getting involved in fundraising and saving face did not apply strongly to Pacific Islanders, as compared to Pākehā and Māori.

Asian gamblers were less likely to start gambling to solve money problems and to continue gambling to cover losses than the other ethnic groups. Friends and family were less likely to introduce them to gambling. Relatively important reasons included difficulties associated with migration, shift work with nothing to do afterwards, and saving face with friends, family and colleagues.

Limitations of the Study

One limitation of the study is the fact that very few representatives of each demographic group were interviewed in Phase 1 of the study. However, the participants that were interviewed provided a wealth of information about gambling behaviour and directions for the development of the questionnaire used in Phase 2. Although the number of participants who completed this questionnaire was reasonably large, it was not representative of the South Auckland population. A much larger sample would be needed to detect differences in reasons and problems among each ethnic group by sex, age and occupational status. For example, young, unemployed or lowly paid males might have different reasons for becoming problem gamblers than middle-aged, female office workers.

The information and data provided retrospectively by the respondents in both phases were probably subject to the problems of response bias and faulty recall. Some of the participants might have been unaware of the influence of their own thinking and beliefs on the way they responded. For example, they might have responded in terms of what they think that they should say based on public health messages. In Phase 2, participants were not asked specifically why they shifted from social to problem gambling. Key indicators were surmised from responses to reasons for starting and continuing gambling. When they completed the reasons for continuing section on the questionnaire they might have rated the items in such a way as to be consistent with their ratings for starting gambling.

Implications

A large number of participants commented that they were drawn (some said they were targeted) by advertising or promotional materials to gamble and subsequently developed problem gambling. One recommendation that could be made is for gambling related policy-makers to consider reviewing policy around the advertising of gambling products. It is important to consider whether certain at-risk groups (including young people, Pākehā, Māori and students) have been targeted at a disproportionate level. Another important consideration should be whether the product is presented in a fair and accurate manner given the addictive elements and potential harms.

Another issue that emerged from both phases of the project related to the accessibility of gambling venues, the availability of gambling activities and the abundance in terms of options of gambling activities catering for different interests and abilities. Responses from Phase 2 of the study rated “I have easy access to money machines” and “I have easy access

to gambling activities” as the second and third factors why they gamble regularly. All of these findings raise the issue that the distribution of gambling activities needs to be controlled and that there needs to be regulation of the whole gambling environment (for example, physical proximity to money machines, withdrawal of cash through EFT-POS when making a purchase) at the national and local government level.

It is apparent from the findings of this research project that in order to reduce or minimise harm related to problem gambling or to prevent people from becoming involved in regular gambling, there are many issues that need to be dealt with other than gambling. These wider issues include employment, the distribution of wealth in society, the level of income support for those in need, social integration for immigrants and the variety of entertainment available in the community. “Winning” or “the hope of winning” has been identified in this project as the major reason for people to gamble or to continue to gamble at a regular level. Closer examination of the qualitative data revealed that some participants thought gambling was their only way to get out of poverty or a way to make ends meet.

As discussed above, “winning” or being “close to a win” was the most salient reason for people to start gambling and continue to gamble at least once a week. From these results it appears that one way to address this is for problem gambling treatment practitioners to provide clients with accurate information and analysis about the possibility (or “impossibility”) of winning. This may help change some of the cognitive distortion surrounding gambling and the chance of winning held by people who gamble at intense levels.

Approximately 80% of respondents regarded gambling venues as places to socialise with people, seek excitement and have fun. It is suggested that, in addition to the control of gambling behaviours, problem gambling treatment practitioners will need to look at problem solving and stress coping skills, and identify alternative forms of entertainment with their clients.

Another significant result was that only 68% of those individuals who actually met the “probable pathological gambling” criteria identified themselves as having a problem with gambling. There is an acute need for educators to work with individuals, family members, church groups or any relevant organisations (for example, schools and workplaces) about the early warning signs of problem gambling and where people can seek help.

Directions for Future Research

This project has established a framework to suggest why people start gambling, why some shift to more frequent gambling and some experience problem gambling. The next stage is to advance and test theoretical models that identify causal paths and determinants of problem gambling in the New Zealand context. It is recommended that an investigation should be made into identifying effective preventive measures to ensure that people gamble in moderate ways and resist the social and cultural factors that might otherwise draw them into gambling problems.

Some regular gamblers in Phase 1 indicated that they participated in gambling activities, but would not develop any gambling problems. The research team recommends studying the incidence of problem gambling among resilient and at risk populations and the associated protective and risk factors that may lead to developing problem gambling. A longitudinal study of people who gamble in a New Zealand urban setting should be undertaken. It is proposed that the focus should be on two groups of individuals for each ethnic group, in order to examine the transition from social to regular to problem gambling. One group would be individuals at risk of becoming problem gamblers; the second group

would be individuals with problem gambling not currently in treatment. It would also be desirable to ascertain the characteristics and variables associated with people with problem gambling who have quit gambling on their own or after a single session of counselling. These individuals would be followed from adolescence to middle age. Variables such as sex, age, occupational and socioeconomic status, physical health, substance use, life events, perceived stress, coping abilities, social support, impulsivity and loss of control would be assessed at regular intervals. Individuals who are involved with the justice system, such as on bail, in jail or on probation, would also be included.

It is paramount that population groups be further encouraged and motivated to investigate their respective ethnic and cultural issues in more depth. This study lends some direction in the areas that demand urgent attention; for example, the extent of participation in electronic machine gambling for Tongan, Māori and Pākehā. Of greater importance, are the groups of people being targeted by gambling promotional activities, such as Māori and Pacific women, youth, the elderly and immigrants. Some Samoans have identified the politics of poverty as being an extremely important driver for developing problem gambling, and a cost-benefit analysis for respective ethnic groups could be extremely significant. There are many areas of potential study that could be conducted, and this study has been a catalyst for a few ideas for future research in problem gambling amongst members of ethno-cultural groups in New Zealand.

Conclusion

In general, data from the questionnaires supported many of the findings from the interviews conducted during Phase 1. Like the development of substance abuse, why people shift from social to problem gambling is related to a combination of economic, social, environmental, and cultural/spiritual factors. The factors may have varying degrees of influence at different stages of the formation of gambling behaviours. Reasons why people develop problem gambling vary within and across different population or cultural groups.

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