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, Dumlao, & 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 sale (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 shows distribution of South Oaks Gambling Screen scores in this sample.

Table 1

Distribution of South Oaks Gambling Screen Scores (SOGS)

SOGS score	Frequency	Percent	Cumulative Percent
0	104	63.4	63.4
1	19	11.6	75.0
2	13	7.9	82.9
3	5	3.0	86.0
4	2	1.2	87.2
5	6	3.7	90.9
6	1	.6	91.5
7	2	1.2	92.7
9	2	1.2	93.9
10	3	1.8	95.7
12	2	1.2	97.0
13	2	1.2	98.2
14	1	.6	98.8
17	1	.6	99.4

	18	1	.6	100.0
Total		164	100	

Using a non-standard cut-off score of 6 to account for an added item in Question 16, approximately 9.1per 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.

Table 2

Summary of Backward Regression Analysis for Variables Predicting South Oaks Gambling Screen (SOGS) score (N = 130)

	Variables	B	SE B	β
Step 1				
	Education Level	-.56	.41	.11
	Sex	-.11	.62	-.02
	Sensation Seeking	-.003	.08	-.04
	Risk Taking	.40	.09	.61**
	Age	-.54	.19	-.24**
	Illusion of Control	-.21	.09	-.24*
Step 2				
	Education Level	-.58	.40	.15
	Sensation Seeking	-.003	.08	-.04
	Risk Taking	.40	.09	.62**
	Age	-.52	.18	-.23**
	Illusion of Control	-.21	.09	-.25*
Step 3				
	Education Level	-.57	.40	-.11
	Risk Taking	.38	.07	.59**
	Age	-.52	.18	-.23**
	Illusion of Control	-.22	.09	-.25*
Step 4				

Risk Taking	.37	.06	.57**
Age	-.51	.18	-.23**
Illusion of Control	-.23	.09	-.27**

Note: Adjusted R^2 = .23 for Step 1; ΔR^2 = .006 for Step 2 (*ps* < .05); ΔR^2 = .005 for Step 3; ΔR^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.

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 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

Classification Results[a]

			Predicted Group Membership		
		GSTATUS2	non problem gambler	problem gambler	Total
Original	Count	non problem gambler	119	21	140
		problem gambler	3	10	13
	%	non problem gambler	85.0	15.0	100.0
		problem gambler	23.1	76.9	100.0

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)

Rotated Component Matrix[a]

	Component		
	1	2	3
walk/jog	.228	.758	
read/write	.137	.811	.119
art/craft		.536	.504
outdoor		.335	.749
visit friends	.322	.485	.469
go to coffee shop	.172	.150	.561
go to dances	.609	.324	
go to gamble	.750		.134
eat in restaurants	.587	.269	
fulltime/part-time work	.312		.566
involvement in club	.572	.383	
talk on telephone	.589		.355
shopping	.562	.153	.383
concerts	.531	.492	
others		-.221	.584

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 9 iterations.

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 sign 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.

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