Journal Information Journal ID (publisher-id): jgi ISSN: 1910-7595 Publisher: Centre for Addiction and Mental Health Article Information © 1999-2004 The Centre for Addiction and Mental Health Received Day: 23 Month: 07 Year: 2003 Accepted Day: 09 Month: 03 Year: 2004 Publication date: July 2004 Publisher Id: jgi.2004.11.13 DOI: 10.4309/jgi.2004.11.13

# Loneliness and life dissatisfaction in gamblers

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	[This article prints out to about 21 pages.]
	This article was peer-reviewed. Submitted: July 23, 2003. The URL was available at the time of submission. Accepted: March 9, 2004.
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	Competing interests: None declared.
	Ethics approval: The University of Windsor Research Ethics Board approved the project entitled "Loneliness and life dissatisfaction in gamblers" in 2001.
	Funding: None.
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# Abstract

This exploratory study examines the manifestation of two experiential variables in undergraduate university students who gamble. The study had 829 participants (270 males and 559 females). They completed self-report questionnaires on gambling-related problems (the South Oaks Gambling Screen), loneliness (the Social and Emotional Loneliness Scale for Adults), and overall life satisfaction (the Satisfaction with Life Scale). Based on their scores on the South Oaks Gambling Screen, participants were divided into two groups: recreational gamblers and atrisk gamblers. Male participants were much more likely to be at-risk gamblers than female participants. Compared to female recreational gamblers, female at-risk gamblers were found to be less satisfied with their lives and lonelier, especially in the romantic and social realms. Male recreational and at-risk gamblers did not differ significantly on these factors. Results support the views that the internal experience of female at-risk gamblers differs from that of their male counterparts, and that loneliness is best considered as a multidimensional construct.

# Introduction

The experiential world of individuals who are struggling with gambling problems remains sparsely mapped. The manner in which problem gamblers experience their lives and themselves in relation to others may play a crucial role in the development and/or maintenance of their gambling. Legg England and Goetestam

(1991) have noted that treatment for excessive gambling should include the reduction of negative internal states. However, few studies have identified these internal states. To take a step toward identifying problem gamblers' negative internal states, the present investigation has sought to determine whether people at risk for problem gambling tend to be lonelier and more dissatisfied with their lives than gamblers not at risk.

#### Loneliness and problem gambling

The retrospective literature on early interpersonal experiences suggests that there is an association between problem gambling and loneliness. This research reveals major interpersonal disturbances during childhood, such as loss of a close family member due to divorce, separation, or death (Whitman-Raymond, 1988). Experiences of abandonment, rejection, emotional neglect, and physical abuse have also been reported in qualitative studies (Rich, 1998; Whitman-Raymond, 1988). These findings are consistent with psychodynamic theories of gambling (Rosenthal & Rugle, 1994) and the Walters lifestyle model of gambling (Walters, 1994). Specifically, early parental deprivation and neglect while growing up and an ambivalent relationship with one's father are frequently noted in the psychoanalytic literature as significant aspects of problem gamblers' childhoods (Rosenthal & Rugle, 1994). According to the Walters lifestyle theory (Walters, 1994), these experiences interfere with the construction of emotional and social bonds with significant others. Insecure attachment, in turn, increases the risk of developing gambling-based relationships as an alternative to meaningful, committed ones.

Current interpersonal difficulties also seem to go hand in hand with problem gambling. The conjugal families of problem gamblers have been described as chaotic and emotionally turbulent. In addition, marital and/or family discord is a common correlate of excessive gambling (Torne & Konstanty, 1992; Tepperman, 1985; Franklin & Thoms, 1989; Lesieur, 1984; Boyd & Bolen, 1970). Compared to "normal" controls, families of pathological gamblers score lower on level of commitment, help, and support (Ciarrocchi & Hohmann, 1989). Gamblers also indicate greater dissatisfaction with their family environment compared to "normals" (Ciarrocchi & Hohmann, 1989). This literature is congruent with the notion that excessive gamblers suffer from a sense of isolation and lack of connection to others. This isolation is also a common theme in the addictive experience (Hopson, 1993).

Members of Gamblers Anonymous groups further support the idea of longing for meaningful relationships as a salient factor in problem gamblers' experience. The members have rated "the company of others who understand you" as the best feature of the self-help group (Brown, 1987). Additionally, a significant relationship exists between gambling involvement and the expectancy of a sense of belonging as a result of gambling (Walters & Contry, 1998). Other sources also report that the

opportunity to socialize with others is one of the key attractions of horse-race betting, bingo, and even slot machines (<u>Rosenthal & Rugle, 1994</u>; <u>Walker, 1992</u>). Thus, longing for interpersonal closeness while lacking the skills to achieve it might frustrate one's relational needs. This frustration creates a vulnerability to seeking solace in addictive quasi-social behaviours such as gambling.

Little is known about how problem gamblers experience their relationships and whether loneliness per se might be a factor. Nevertheless, t here are a few recent reports in support of the notion that women with gambling problems report greater loneliness than nonproblem-gambling women. In a study of women who used electronic gaming machines, <u>Trevorrow and Moore (1998)</u> found that problem-gambling women were lonelier than nonproblem-gambling women. Similarly, <u>Brown and Coventry (1997)</u> found that women who reported problems controlling their gambling on electronic gaming machines stated that loneliness, isolation, and boredom were their main motives for gambling. Finally, <u>Boughton and Brewster (2002)</u> reported that 54% of women problem gamblers felt that it would be very or extremely helpful for treatment programs for problem gamblers to address issues of isolation and loneliness.

The issue of gender differences remains controversial. Loneliness may be a motivating factor behind problem gambling, or a trigger to gamble, in women, but not in men (Coman, Burrows, & Evans, 1997; Grant & Kim, 2002). Although limited data are available, Ohtsuka, Bruton, DeLucia, & Borg (1997) did conclude that loneliness was not a significant predictor of pathological gambling for either men or women.

A major limitation in the research on loneliness among problem gamblers is the way in which it has been assessed. Standardized measures are often not employed, with some studies (e.g., <u>Boughton & Brewster, 2002</u>) simply asking participants a single question related to loneliness. Furthermore, all of the studies treat loneliness as a unidimensional construct, although current research views loneliness as a complex multidimensional factor (<u>DiTomasso & Spinner, 1993</u>; <u>Russell, Cutrona, Rose, & Yurko, 1984</u>). Loneliness has both a subjective/emotional facet and an objective/social one (<u>Cramer & Barry, 1999</u>; <u>DiTomasso & Spinner, 1993</u>). Social loneliness refers to isolation from others due to inadequate access to satisfactory social relationships. Emotional loneliness stems from the absence of a close attachment relationship, whether involving family members or a romantic partner (<u>Weiss, 1973</u>). To date, subtypes of loneliness have not been distinguished in research on problem gamblers.

#### Life satisfaction and problem gambling

The theme of escape as a motivation for engaging in games of chance is ubiquitous in the literature on gambling. Several authors assert that problem gambling develops out of the need to obtain relief from a stressed state, be it noxious feelings of inferiority, guilt, rejection, and/or inadequacy (Jacobs, 1988); recurring dysphoria/depression and chronic understimulation (McCormick, 1987; Griffiths, 1993; Carroll & Huxley, 1994); or a combination thereof (Blaszczynski, McConaghy, & Frankova, 1990). Individuals who suffer from such negative affective states may turn to gambling as an attempt to regulate their experience. The intense focus and concentration of gambling may serve to push unpleasant aspects of life out of awareness (Rosenthal & Rugle, 1994), so the activity allows gamblers to "self-medicate" or "dissociate" from the condition of stress (Murphy & Khantzian, 1995; Jacobs, 1988).

General dissatisfaction is one of the primary ingredients of both depressive states and boredom (Beck, 1976; Farmer & Sundberg, 1986), two important risk factors for the development of problem gambling. Therefore, it could be that those who feel that their daily life is unrewarding, troublesome, or lacking in complex and novel stimuli - that is, individuals who are dissatisfied with their lives - are at higher risk for excessive gambling. This connection is well established in other forms of addiction (Kaufman, 1994), but research on life satisfaction in problem gamblers is sparse and inconclusive. Ohtsuka et al. (1997) found that self-reported unhappiness is a significant predictor of gambling problems for both males and females. This finding, however, is at odds with Kusyszyn's (1984) review, which indicates that male college students who gamble generally feel happier than their nongambling counterparts. It is not known whether the same is true for excessive gamblers. <u>Winslow (2002)</u>, in a study of the elderly, found no significant difference on life satisfaction between nongamblers, nonproblem gamblers, and problem gamblers.

The present investigation was an attempt to further our understanding of two potential components of the experiential world of problem gamblers - loneliness and dissatisfaction with life. It was hypothesized that individuals at risk for problem gambling would differ in their experience of both loneliness and dissatisfaction with life from gamblers who are not at risk. Specifically, at-risk gamblers would present as significantly lonelier and more dissatisfied with their lives than would gamblers not at risk. To improve on the methodology of previous research in this area, psychometrically validated instruments were employed, including a multidimensional measure of loneliness.

### Method

### Participants

For this project, we studied 829 undergraduate students (270 males and 559 females) at the University of Windsor in Ontario, Canada. They were recruited on a voluntary basis from an introductory psychology course and were offered bonus

marks as an incentive for participation in the study. All 829 participants acknowledged some gambling behaviours. Their ages ranged from 17 to 47 years, with a mean of 20.12 years (SD = 3.52). Because the participants were recruited from an introductory psychology course, 78% were in their first year of university. Of the remaining participants, 13% were in their second year of study, 6% were in third year, 2% were in fourth year, and 1% were in fifth year. The study was cleared by the university's Research Ethics Board, and all appropriate ethical standards were followed.

#### Measures

The South Oaks Gambling Screen (SOGS) (Lesieur & Blume, 1987) is a 20-item scale with the guestions modelled after DSM-III criteria for pathological gambling. It has been used to identify gamblers in substance-abusing and psychiatric populations, as well as in community surveys. Scores correlate well with both collateral report and clinician ratings. Internal reliability was high in a combined sample of students and gamblers (a = .97), and retest reliability in a treatment sample of gamblers was.71 over 30 days. The internal reliability of the test was also good (Breen & Zuckerman, 1996). A score of five or higher on the SOGS indicates possible pathological gambling involvement. A score of zero, one or two indicates no gambling problems, and a score of three or four indicates possible problem gambling. The SOGS also contains a list of gambling behaviours (GACT), which gathers information about how frequently the respondents engaged in each gambling activity (i.e., never, less than once a week, once a week, or more than once a week). For the purposes of the present investigation, participants who obtained SOGS scores of three or higher were considered at risk for problem (or pathological) gambling and termed at-risk gamblers. As all participants reported some gambling involvement, participants who obtained SOGS scores of zero, one, or two were considered not at risk for problem gambling and termed recreational gamblers.

The Social and Emotional Loneliness Scale for Adults (SELSA) (DiTomasso & Spinner, 1993) is a multidimensional scale that measures different facets of loneliness experienced by individuals. The measure is further broken down into social loneliness (i.e., lack of friendships) and emotional loneliness. The latter can be divided into two subtypes - romantic loneliness (i.e., lack of attachment to a romantic partner) and family loneliness (i.e., lack of closeness and attachments with family members.). There are 37 items in the measure, and each item of the scale is scored on a Likert scale ranging from one to seven, with higher scores indicating greater levels of loneliness. Scores on all three subscales were found to have high internal consistencies, with Cronbach alphas ranging from.89 to.93. The SELSA produces reliable scores and has good concurrent, convergent, and discriminant validity (DiTomasso & Spinner, 1993).

The Satisfaction with Life Scale (SLS) (Diener, Emmons, Larsen, & Griffin, 1985) is a widely used five-item Likert-type scale assessing global life satisfaction. Each item is scored on a scale of one to seven, with higher scores indicating greater life satisfaction. The items of the SLS demonstrate high internal consistency (a =.87; Diener et al., 1985), and the instrument demonstrates high temporal reliability. The validity of the test has been demonstrated by correlating it to other measures of subjective well-being. S cores on the SLS were shown to correlate moderately to highly with other measures of subjective well-being, with most measures correlated at r = .50 or higher for each of the two samples from the original study. Unlike other such measures, however, the SLS does not tap relative emotions such as negative mood and loneliness. It is positively correlated with positive personality characteristics and is suitable for use with different age groups (Diener et al., <u>1985</u>).

### Results

First, the internal reliability (a coefficients) of the measures was examined. The three measures demonstrated adequate reliability - SOGS (a =.73), SLS (a =.85), and SELSA (a =.83). Next, descriptive statistics on SOGS scores were examined to assess the prevalence of gambling problems in our sample. The mean score on the SOGS for the entire sample was 0.78 (SD = 1.58). The frequency distribution of the scores was positively skewed, with the majority of scores located at the low end of the spectrum. That is, most of the participants did not have a gambling problem. Specifically, 529 participants (63.8%) did not endorse any of the items on the SOGS, and 228 participants (27.5%) obtained SOGS scores of one or two. Together, these 757 participants constituted the recreational gamblers group (222 males, 535 females), or individuals who participated in gambling behaviours but were deemed not to be at risk for problem gambling. Forty-three participants (5.2%) scored in the possible problem gambling range, obtaining SOGS scores of three or four. Finally, 29 participants (3.5%) earned SOGS scores of five or higher, placing them in the possible pathological gambling range. Together, the 72 participants in these latter two groups (8.7%) constituted the at-risk gamblers group (48 males and 24 females).

The two groups (recreational and at-risk) were then compared to ascertain whether they differed in age or sexual composition. Participants in the recreational gamblers group (mean age = 20.02 years; SD = 3.29) were slightly younger than participants in the at-risk gamblers group (mean age = 21.18 years, SD = 5.28), but this difference did not reach statistical significance when corrected for unequal variances (t = 1.65, df = 805, p = .10). The two groups did differ significantly in sexual composition ( $x^2$ = 41.74, df = 1, p < .001): 17.8% of the male participants were in the at-risk gamblers group compared to only 4.3% of the female

participants. Males (M = 113.18, SD = 25.10) scored significantly higher (t = 2.54, df = 794, p < .05) than females (M = 108.46, SD = 24.24) on social and emotional loneliness, but there were no sex differences on life satisfaction.

The mean number of gambling activities reported for the entire sample was 8.44 (SD = 2.86). All of the participants indicated that they had engaged in some kind of gambling activity, with the number of items endorsed ranging from 4 to 20. As one would expect, participants in the at-risk gamblers group reported a greater number (t = 8.86, df = 812, p < .001) of gambling activities (M = 17.19, SD = 2.63) than did the recreational gambler participants (M = 14.21, SD = 2.67), and males reported a greater number (t = 7.80, df = 419.35, p < .001, correcting for unequal variances) of gambling activities (M = 15.61, SD = 3.12) than did females (M = 13.90, SD = 2.43).

A bivariate correlational analysis between the loneliness and satisfaction variables (see Table 1) revealed significant (p < .01) and sizable correlations between satisfaction with life and social and emotional loneliness, between social and emotional loneliness and each of the loneliness subscales, between satisfaction with life and each of the loneliness subscales, and between all of the loneliness subscales.

Next, separate multivariate analyses of variance were conducted for female and male participants because of the significant differences in sexual composition between the recreational gamblers group and the at-risk gamblers group (see Table 2 and Table 3). It should be noted that the purpose of these separate analyses was not to determine the interaction between gender and problem gambling as possible predictors of loneliness or life satisfaction. First, female recreational gamblers and at-risk gamblers were compared on the life satisfaction and loneliness scales. The group differences were significant overall (F = 7.31, df = 2, 529, p < .001) and for both the loneliness (F = 13.62, df = 1, 530, p < .001) and life satisfaction (F = 8.01, df = 1, 530, p < .01) scales individually. Then, female recreational and at-risk gamblers were compared on the three loneliness subscales (romantic, family, and social loneliness). Again, the group differences were significant overall (F = 4.99, df = 3, 532, p < .01). As well, the group differences were significant on two of the three subscales: romantic loneliness (F =6.29, df = 1, 534, p < .05) and social loneliness (F = 9.18, df = 1, 534, p < .01). To correct for the unequal variances, a t-test (equal variances not assumed) was used in place of the univariate F-test for the social loneliness subscale. The recreational gambler and at-risk gambler females did not differ significantly on family loneliness (t = 1.68, df = 24.06, p > .05). Similar MANOVAs were conducted for male participants. For males, the overall difference between recreational gambler and atrisk gamblers groups on the two dependent variables, as well as on the three loneliness subscales, failed to reach statistical significance.

Finally, analyses of variance were conducted to compare the two subgroups within the at-risk gamblers group (probable problem gamblers and probable pathological gamblers) on the demographic and independent variables. The subgroups did not differ significantly on age or sexual composition, on the independent variables overall, or on any individual independent variable.

# Discussion

This study was designed to assess differences in certain experiential factors between recreational and at-risk gambling undergraduate university men and women. If we are to appreciate what causes and maintains problem gambling, and what treatment approaches are likely to be successful, we will need to expand our still nascent understanding of the inner experience of problem gamblers. In this study of university undergraduates, we explored differences between recreational gamblers and at-risk gamblers on two experiential dimensions - satisfaction with life and loneliness. Upon analysis of the sample, it was determined that differences existed in the composition of these two groups, and men and women were not evenly distributed between at-risk gamblers and recreational gamblers. For this reason, all further analyses were separated for men and women. No significant differences were found between male recreational and at-risk gamblers, whereas female recreational and at-risk gamblers differed from one another on several measures.

Female recreational gamblers and at-risk gamblers differed in their experience of the constructs measured by the SELSA, while male recreational gamblers and atrisk gamblers did not. Female at-risk gamblers were significantly lonelier than their recreational-gambling counterparts. These findings are consistent with previous reports that found loneliness to be an issue for problem-gambling women (Boughton & Brewster, 2002; Brown & Coventry, 1997; Trevorrow & Moore, 1998) but not for men (Coman, Burrows & Evans, 1997; Grant & Kim, 2002). They are, however, inconsistent with an earlier report, which failed to detect a connection between self-ratings of loneliness and pathological gambling regardless of gender (Ohtsuka et al., 1997). Female recreational and at-risk gamblers also differed on two of the three individual dimensions of loneliness - social loneliness (i.e., lack of friendships, or isolation from others due to inadequate access to satisfactory social relationships) and romantic loneliness (i.e., lack of attachment to a romantic partner). The difference on social loneliness supports previous findings that the opportunity to socialize and establish a sense of belonging and group solidarity is an important motivating force behind gambling (Rosenthal & Rugle, 1994; Walker, 1992; Greenberg, 1980), at least for female gamblers. The significance of romantic loneliness might be specific to the developmental stage of most of the participants (university students), and not necessarily generalizable to other age groups. Most university students are at a stage in which they grow increasingly autonomous

from their families of origin, but have not yet established families of their own (Adams, Gullotta, & Montemayor, 1992; Erikson, 1968). Because developing a romantic relationship is a more salient concern at this stage of the life cycle than in older adult gamblers, lack of attachment to an intimate partner may be experienced more deeply by university-aged women who engage in heavier gambling behaviours than their older counterparts. Despite earlier reports that family conflict and/or alienation were important in the life of problem gamblers (Torne & Konstanty, 1992; Ciarrocchi & Hohmann, 1989; Whitman-Raymond, 1988; Green 1844), family loneliness was not found to be a significant issue for individuals at risk for gambling problems among our participants. However, caution is needed in generalizing this finding to the larger population of at-risk problem gamblers; the developmental stage of most of our participants might have played a part here, too. As other adults are much more likely than university students to have established families of their own, loneliness within the family might well be an important factor in the experience of problem gambling in the general population.

The mechanism by which loneliness and at-risk problem gambling might be related is poorly understood. Interviews with individuals in recovery from addictive behaviours suggest that those who enjoy confiding, supportive relationships are disinclined to seek out activities such as gambling that alter the mental state (McCartney, 1995). Lonely individuals, on the other hand, not only lack the buffering effect of interpersonal support, but face the pain of social isolation, which may motivate them to seek escape from this negative affect through gambling (Rosenthal & Rugle, 1994). Gambling may legitimize the time spent in the company of others and provide a sense of belonging and group solidarity through engagement in a parallel activity with other players (Walker, 1992). Unlike committed interpersonal relationships, however, this camaraderie makes no claims for intimacy, which might cause discomfort in gamblers with underdeveloped skills in seeking social and emotional support (Rosenthal & Rugle, 1994).

How should we understand that male recreational and at-risk gamblers did not differ in their levels of loneliness? Loneliness carries a wealth of subjective meanings. For example, <u>Moustakas (1957)</u> differentiates between existential loneliness, the anxiety of loneliness, the loneliness of solitude, and the loneliness of a broken life. The measure used in the present study employed a precise, and therefore constrained, definition of loneliness that is blind to many of the nuances inherent in the experience. It might be that male at-risk gamblers tend to suffer from a type of loneliness not measured. Alternatively, it could be that loneliness is simply not a factor in problem gambling among men, or at least among university-aged men.

Female recreational and at-risk gamblers also differed on the SELSA, while male

recreational and at-risk gamblers did not. Female at-risk gamblers expressed greater dissatisfaction with their lives than did their recreational-gambling peers. The sparse literature specifically on life satisfaction in problem gamblers is inconsistent. Life satisfaction has been found to be a significant predictor (Ohtsuka et al., 1997) or not to be a significant predictor (Winslow, 2002) of problem gambling for both men and women. The finding of the present study, at least for women, is consistent with the view that there is a direct relationship between gambling involvement and negative emotional states (e.g., Carroll & Huxley, 1994). Our failure to find a relationship between satisfaction with life and at-risk gambling among men is puzzling. The notion that problem gambling develops as an attempt to escape from a distressed state is found repeatedly in the literature (Blaszczynski et al., 1990; Carroll & Huxley, 1994; Griffiths, 1993; Jacobs, 1988; McCormick, 1987; Murphy & Khantzian, 1995; Rosenthal & Rugle, 1994). However, the SLS used in this study measures a global and trait-like construct (Diener et al., 1985) rather than specific negative emotions. It is possible that gamblers experience dysphoric and positive emotional states simultaneously, and only the former plays a role in gambling pathology. This interpretation is consistent with evidence that positive emotionality and negative emotionality are relatively independent factors that can coexist simultaneously (Diener & Emmons, 1984; Tellegen, 1985). Men may be generally satisfied with their lives in spite of experiencing a variety of negative affective states from which they try repeatedly to escape through excessive gambling. Or it might be that dissatisfaction with life is not a factor in problem gambling for university-aged men. Factors such as sensation seeking (Langewisch & Frisch, 1998; Coventry & Brown, 1993; Kuley & Jacobs, 1988) or a desire to increase one's level of arousal (Leary & Dickerson, 1985) might be more salient for males in this age group.

Our participants appear to be typical of university students with regard to gambling problems. We found an 8.8% prevalence rate for at-risk gambling, which is generally consistent with the range set out in the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.) (American Psychiatric Association, 1994) for pathological gambling and with rates reported in the literature (e.g., Shaffer & Hall, 1996; Govoni, Rupcich, & Frisch, 1996; Marshall & Wynne, 2003). The prevalence rate for at-risk gambling that we found for males (17.8%) is considerably higher than what we found for females (4.3%). This is also consistent with previous research that males gamble considerably more than females (Govoni et al., 1996; Ladouceur, Dube, & Bujold, 1994) and that this sex difference is particularly great for people in their teens and early 20s (Lesieur et al., 1991/1992).

This study is not without limitations. Participants were not formally diagnosed for the presence or absence of gambling pathology. The SOGS by itself is insufficient for making formal diagnoses. Rather, participants who scored in the probable problem gambling and probable pathological gambling ranges on the SOGS were considered to be at-risk gamblers. Further research is needed to determine whether diagnosed pathological gamblers respond as our at-risk gamblers did on loneliness and life satisfaction questionnaires. In addition, caution should be employed in generalizing the present findings beyond university-aged students. Developmental stages may play an important role in differentiating the motivations and affective experiences of problem gamblers of different ages. Being cross sectional, our study does not do justice to the dynamic nature of experiential phenomena but provides only a snapshot of the relationships between at-risk gambling, life satisfaction, and loneliness. For example, the fact that loneliness in the family was not significantly different for the at-risk and recreational gambling groups in university-aged women should not lead one to discount the possibility that it might be an important factor later in life. Various factors may wax and wane at different stages of the gambler's "career," and cross-sectional research cannot elucidate these dynamics. Due to the nature of the study, the important question of directionality remains unanswered. Does loneliness increase the risk of problem gambling among women, or does problem gambling result in loneliness as the gambler's resources (emotional, financial, and temporal) are diverted from relationships to gambling? Furthermore, the sample size was not large enough to assess differences in inner experience between problem gamblers who prefer different types of gambling activities. The need for the company of others, for instance, may be a salient factor in table players, but less so in those choosing solitary forms of gambling, such as playing slot machines. Finally, as discussed earlier, the nature of the loneliness and life satisfaction scales employed may have prevented us from examining other important types of these experiences.

Further research is needed to cross-validate our findings on the relationship between problem gambling, life satisfaction, and loneliness among university students and to extend our research to adults of all ages. A host of other experiential factors need to be investigated before we can develop a more fully textured appreciation of the factors that characterize, lead to, and maintain at-risk problem gambling in men and women. It is clear from this study that research on problem gambling must take into account gender differences as well as the multidimensional nature of loneliness. Finally, longitudinal research is needed to investigate the issues of directionality and differences in developmental stages.

The present study also has implications for clinicians working with problem gamblers. Clearly, excessive gambling causes serious problems by itself. Nevertheless, the gambling behaviour may also be seen, at least in some cases, as a symptom of experiential dysfunction that must be addressed along with the problematic behaviour. Furthermore, the clinician should not assume that the same experiential factors underlie problem gambling in all people. The importance of addressing particular experiential issues such as life dissatisfaction, loneliness of various kinds, sensation seeking, and other negative affective states will most likely vary between men and women, and between people across the lifespan. In particular, issues of life dissatisfaction and social and romantic loneliness will likely need to be addressed in the treatment of university-aged female problem gamblers, but not necessarily in the treatment of problem gamblers of other demographic groups. Sensitivity to individual differences is critical.

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### Tables

Table 1

Variable	SLS	SELSA	RL	FL	SL
Satisfaction with life (SLS)	1.00	55 <sup>1</sup>	33 <sup>1</sup>	44 <sup>1</sup>	- .42 <sup>1</sup>
Social & Emotional Loneliness (SELSA) 2		1.00	.79 <sup>1</sup>	.63 <sup>1</sup>	.61 <sup>1</sup>
Romantic loneliness (RL)			1.00	.13 <sup>1</sup>	.19 <sup>1</sup>
Family loneliness (FL)				1.00	.38 <sup>1</sup>
Social loneliness (SL)					1.00

<sup>1</sup> Correlation is significant at the 0.01 level (2-tailed).

<sup>2</sup> Social and emotional loneliness is an overall loneliness score comprising the instrument's subscales: romantic, family, and social loneliness.

#### Table 2

Group comparisons for the dependent variables among female participants

Firefox

Variable		Total sample	$RG^{\perp}$	ARG 2 group	<i>F</i> (df)	р
SLS	Ν	555	532	23		
	М	24.70	24.85	21.17	7.98 (1, 516)	.005
	SD	6.15	6.06	7.16		
	N	536	512	24		
SELSA	M	108.46			13.54 (1, 516)	.001
	SD	24.24	23.98	23.10		
Romantic	Ν	538	514	24		
loneliness	М	37.75	37.42	44.88	6.29 (1, 534)	.012
subscale	SD	14.30	14.27	13.29		
Family loneliness subscale <sup>3</sup>	N	556	532	24		
	М	25.32	25.10	30.13	6.29 (24.1)	.105
	SD	10.54	10.30	14.47		
Social loneliness subscale	Ν	553	529	24		
		41.46	41.24	46.50	9.18 (1, 534)	.003
	SD	8.26	8.19	8.46		

<sup>1</sup> RG = recreational gamblers

<sup>2</sup> ARG = at-risk gamblers

<sup>3</sup> Levene's test for equality of variances was significant for the family loneliness subscale. To correct for the unequal variances, a *t* -test (equal variances not assumed) was used in place of the univariate *F* -test for the family loneliness subscale.

#### Table 3

Group comparisons for the dependent variables among male participants

Variable		Total sample	RG <sup>1</sup> group	ARG 2 group	<i>F</i> (df)	р
	Ν	258	216	42		
SLS	М	24.96	25.12	24.21	0.74 (1, 256)	.389
	SD	6.13	5.93	7.08		
	Ν	260	217	43		
SELSA	М	113.18	112.49	116.65	13.54 (1, 258)	.321
	SD	24.24	23.98	23.10		
Domontio	Ν	258	216	42		
Romantic loneliness	М	40.83	40.85	40.69	.004 (1, 256)	.948
subscale	SD	14.30	14.27	13.29		
Family	Ν	258	216	42		
ranny loneliness subscale	М	25.88	25.54	27.67	1.725 (1, 256)	.190
	SD	9.61	9.57	9.73		
Social	Ν	258	216	42		
loneliness subscale	М	42.20	41.96	43.40	1.169 (1, 256)	.281
	SD	7.91	7.87	8.12		

т

 $^{1}$  RG = recreational gamblers

<sup>2</sup> ARG = at-risk gamblers

Keywords:

*Keywords* gambling

loneliness

dissatisfaction

women

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