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Problem gambling and family violence: family member reports of prevalence, family impacts and family coping

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Abstract

There exists only a small number of empirical studies investigating the patterns of family violence in problem gambling populations, although some evidence exists that intimate partner violence and child abuse are among the most severe interpersonal correlates of problem gambling. The current article reports on the Australian arm of a large-scale study of the patterns and prevalence of co-occurrence of family violence and problem gambling in Australia, New Zealand and Hong Kong. The current study screened 120 help-seeking family members of problem gamblers in a range of clinical services for both family violence and problem gambling. The main results showed that 52.5% reported some form of family violence in the past 12 months: 20.0% reported only victimisation, 10.8% reported only perpetration and 21.6% reported both victimisation and perpetration of family violence. Parents, current and ex-partners were most likely to be both perpetrators and victims of family violence. There were no gender differences in reciprocal violence but females were more likely to be only victims and less likely to report no violence in comparison to males. Most of the 32 participants interviewed in depth, reported that gambling generally preceded family violence. The findings suggest that perpetration of family violence was more likely to occur as a reaction to deeply-rooted and accumulated anger and mistrust whereas victimisation was an outcome of gambler's anger brought on by immediate gambling losses and frustration. While multiple and intertwined negative family impacts were likely to occur in the presence of family violence, gambling-related coping strategies were not associated with the presence or absence of family violence. The implications of the findings for service providers are discussed.

Keywords: Problem gambling; Family violence; Family impact; Family coping

Background

Emerging evidence shows that the most common adverse impacts of problem gambling include family and dyadic relationship dysfunction, financial hardship, co-occurring psychopathologies and family conflict (Dowling et al. 2009; Hodgins et al. 2006; Jackson et al. 1999; Kalischuk et al. 2006). Among concerned significant others, spouses and intimate partners are typically the ones most affected, primarily in the form of intra-and interpersonal distress (Hodgins et al. 2007). Extended family members of problem gamblers, such



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as parents, are also financially and emotionally affected, especially when the problem gambler has no marital or intimate partner willing or able to act as a primary caregiver (Hodgins et al., 2006; Patford, 2007).

The family impacts of problem gambling

A number of studies focusing on the intrapersonal impact of problem gambling indicate that female partners report significant emotional disturbances, including anger, depression and anxiety (Dickson-Swift et al. 2005; Hodgins et al., 2007; Lorenz & Shuttleworth, 1983; Lorenz & Yaffee, 1988). Testifying to the depth of the emotional distress experienced by partners, the findings of some studies indicate that female partners report higher rates of suicidal ideation and attempted suicide than the general population (Lesieur & Rosenthal, 1991; Lorenz & Shuttleworth, 1983; Lorenz & Yaffee, 1988). Female partners of problem gamblers are also likely to engage in excessive substance use, impulsive spending and to report high rates of emotionally-related physical complaints (e.g., headaches, gastrointestinal ailments and hypertension) in response to problem gambling behaviour (Dickson-Swift et al., 2005; Lesieur & Rosenthal, 1991; Lorenz & Shuttleworth, 1983; Lorenz & Yaffee, 1988).

Some research shows significant dysfunction and dissatisfaction in the family and intimate relationships of problem gamblers (Dowling et al., 2009; Hodgins et al., 2007). Relationship dysfunction, in turn, is associated with a greater number of emotional consequences and greater gambling problem severity (Hodgins et al., 2007). Samples of problem gamblers and their partners have reported these relationship difficulties (Dowling et al., 2009; Harvey et al., 2007; Hodgins et al., 2007). Negative relationship dynamics are further illustrated in studies where partners of problem gamblers report unsatisfactory sexual relationships, communication issues, and difficulty in conflict resolution (Duvarci & Varan, 2000; Lorenz & Yaffee, 1988; Lorenz and Yaffee 1986). Early studies also suggest that a significant proportion of female partners and male problem gamblers consider separation or divorce, and that the rate of divorce is higher than in the general population (Dickson-Swift et al., 2005; Lorenz & Yaffee, 1988; Lorenz & Yaffee, 1986; National Opinion Research Centre, 1999).

While the link between problem gambling and these family members is relatively well established, the mechanisms involved require further explanation. Stress and coping frameworks posit that emotional distress and relationship difficulties in the family can be attributed to the lack of resources that are necessary to cope with the ongoing difficulties created by problematic gambling (Krishnan & Orford, 2002; Rychtarik and McGillicuddy 2006). Paradoxically, behaviours adopted by family members to cope with the gamblingrelated difficulties can serve to exacerbate these intra-and inter-personal impacts of problem gambling behaviour. For instance, a significant proportion of partners report borrowing from friends and family, covering for their partners, finding excuses for work absences, paying gambling debts, avoiding discussions about gambling, and taking on the responsibilities of the gambler (Lesieur & Rothschild, 1989; Lorenz and Yaffee 1986; Lorenz & Yaffee, 1988; McGurrin, 1992). The literature also suggests that couple relationships may become entrenched in a cyclical process, with problem gamblers experiencing an increased need to gamble as partners try to control their behaviour (Tremblay & Brisson, 2007). Over time, these dynamics may contribute to gambling relapses, escalating the level of conflict and mistrust in the family and diminishing its financial resources (Duvarci & Varan, 2000; Lorenz & Yaffee, 1988; Lorenz & Yaffee, 1986).

Problem gambling and family violence

Emerging research suggests that problem gambling is a specific risk factor for family violence. While the empirical evidence is limited, most of the available studies have examined problem gambling in relation to intimate partner violence (IPV) victimisation or perpetration. The high occurrence of both victimisation and perpetration of IPV has been documented by samples of problem gamblers and their family members (Afifi et al. 2010; Bland et al. 1993; Echeburua et al. 2011; Korman et al. 2008; Liao, 2008; Lorenz & Shuttleworth 1983; Raylu and Oei 2007). While these studies suggest that problem gambling is a risk factor for IPV, different findings were reported in the first published study to examine problem gambling and IPV victimisation between both partners within an intimate relationship (Schluter et al. 2008). In this New Zealand study, using face-to-face interviews, no association between problem gambling and IPV victimisation in 700 couples with a Pacific infant was found although there was a strong association between alcohol use and IPV. The authors suggested that the null finding on problem gambling and IPV may be a product of two inherent limitations of the methodology: the non-standardised maternal problem gambling measure and the small sample of problem gamblers, rather than the absence of a true association between problem gambling and IPV.

Four years later, however, data from a further wave of the Pacific Islands Families study indicated that for the fathers in the cohort, gambling was associated with being perpetrators as well as victims of verbal aggression, and that being at risk of developing problem gambling or being a problem gambler were also associated with physical violence. Conversely, for the cohort mothers, at risk/problem gambling was associated with lower odds for perpetrating violence (Bellringer et al. 2008).

Studies of male-batterers and their female victims show consistently high rates of pathological gambling in these men (Brasfield, Febres, Shorey, Strong, Ninnemann, Elmquist, Andersen, Bucossi, Schonbrun, Temple, & Stuart, 2012; Goldstein, Walton, Cunningham, Resko, & Duan, 2009; Muelleman et al. 2002; Rothman et al. 2006). However, several studies indicate that females are as likely to use aggressive behaviours as males (Afifi et al., 2010; Cantos et al. 1994; Korman et al., 2008; Straus, 2008; Swan et al. 2008). While some suggest reciprocal, or bi-directional, IPV is more common than a consistent pattern wherein one person is either the victim or the perpetrator of violence (Korman et al., 2008), conceptual (Stark,2009) and measurement concerns favour gender asymmetry (Taft et al. 2001). In addition to this emerging literature investigating the co-occurrence of problem gambling and IPV, several studies have revealed a high incidence of childhood victimisation experienced by problem gamblers or perpetration of child abuse by problem gamblers and their spouses / partners (Afifi et al., 2010; Bland et al., 1993; Lesieur & Rothschild, 1989; Lorenz & Shuttleworth, 1983). Taken together, the findings of these studies are suggestive of a relationship between the presence of problem gambling and vulnerability to family violence. Unfortunately, few studies provide information about the relationship between problem gambling and violence that extends into the family beyond intimate partners and children (i.e., family violence). Future investigations of the patterns of problem gambling and family violence should ideally include multiple family members, evaluating different types of violence and how patterns of violence relate to other factors such as gender, age and other demographic characteristics (Korman et al., 2008; Van der Bilt & Franklin, 2003).

Moreover, the precise nature of the relationship between problem gambling and family violence remains unknown. Although the commonly held view is that people gamble

as a mechanism to cope with family violence (Affifi et al., 2010; Cunningham-Williams et al. 2007; Echeburua et al., 2011; Korman et al., 2008), it is possible that stressors caused by problem gambling activity may result in domestic conflict and the perpetration of violence by family members (Echeburua et al., 2011; Korman et al., 2008). Similarly, although the most common hypothesis relating to family violence perpetration is that the stress resulting from problem gambling is a catalyst for the perpetration of violence by the problem gambler against family members (Affifi et al., 2010; Korman et al., 2008; Muelleman et al., 2002), it may be that problem gambling is consequent to the perpetration of family violence (Korman et al., 2008). Further research, particularly through the use of prospective studies, is required to empirically evaluate the temporal and causal relationships between gambling and familial violence.

Understanding the relationship between problem gambling, family impacts, family coping, and family violence can provide information that may be employed to develop enhanced prevention and intervention programs for problem gamblers and their family members. An enhanced understanding about the impacts of problem gambling and the coping of family members of problem gamblers, especially in the presence of family violence, is a necessary prelude to more holistic treatment approaches. Accordingly, the current study aims to: (1) establish the prevalence and patterns of family violence victimisation and perpetration in a sample of help-seeking family members of problem gamblers; and (2) explore gambling-related family impacts and coping strategies in the presence or absence of family violence.

Method

Participants

The current article reports on Australian data only from a large-scale study investigating the prevalence of problem gambling and family violence in help-seeking populations across Australia and Hong Kong. During Phase 1 of this project, new clients (i.e., any individual considered to be a new presentation by the relevant agency) from participating treatment agencies in Australia were systematically screened for problem gambling, family member problem gambling, and family violence. During Phase 2, 13 interviews with family members of problem gamblers recruited from specialist problem gambling treatment agencies and 19 interviews with family members of problem gamblers recruited from other services such as drug and alcohol and family service agencies in Australia were conducted.

The participants described in Table 1 from Phase 1 are the 120 new clients of the participating problem gambling agencies, resulting from screening of consecutive cases, who reported past year family member problem gambling. In Phase 2 of the study, family members of problem gamblers who were also problem gamblers themselves were *only* administered the survey for problem gamblers and did *not* complete the survey as family members of problem gamblers. Of the family members of problem gamblers screened in Phase 1, 42 (35.0%) reported no gambling problems of their own and were therefore eligible to be administered the Phase 2 family member interview. Of these 42 family members without their own gambling problems, 32 (76.2%) were recruited for Phase 2 in-depth interviews that included standardised measures and a small number of open-ended questions relating to family impacts and coping. Table 1 displays the demographics of Phase 1 and Phase 2 participants. In reporting the results, we employ

Table 1 Distributions of demographic characteristics for Phase 1 and Phase 2 participants

	Phase 1	Phase 1 (n = 120)%		2 (n = 32)%
	Male (n = 57)	Female (n = 63)	Male (n = 4)	Female (<i>n</i> = 28)
Born in Australia	82	85	75	86
English 1st language	95	91	100	96
Single a, b	54	27	25	40
In a relationship ^a	46	73	75	60
Single parent/person household a, b	23	35	25	48
Living with a partner ^a	34	54	50	41
Group/shared household a, b	42	10	25	11
Age: (M, [SD]) a, b	36.1 (12.1)	42.4 (11.6)	34.8 (9.3)	41.0 (13.8)

Note: a = Males and females significantly different in Phase 1 (p = < .05); b = Males and females significantly different in Phase 2 (p = < .05).

the term 'participant' to refer to the help-seeking family members of problem gamblers who acted as the informants for this study; the term 'family member' to refer to other family members (including a problem gambler family member) of the informant, the term 'family violence victim' to refer to participants who are victims of family violence, and the term 'family violence perpetrator' to refer to participants who are perpetrators of family violence.

Measures

Phase 1 measures

The Phase 1 screening tool included questions about participant demographic information (as shown in Table 1), problem gambling, family member problem gambling, and family violence victimisation and perpetration.

Participant and family member problem gambling Participants were screened for past year problem gambling using the Brief Bio-Social Gambling Screen (BBGS; Gebauer et al. 2010). Participants answered yes or no to the three questions of the BBGS: In the last 12 months: (1) 'Have you become restless, irritable or anxious when trying to stop/cut down on gambling?', (2) 'Have you tried to keep your family or friends from knowing how much you gambled?', and (3) 'Did you have such financial trouble as a result of your gambling that you had to get help with living expenses from family, friends, or welfare? Participants were classified as problem gamblers if they positively endorsed one or more of the three items. As noted previously, these participants who were identified as having a gambling problem themselves were not given a phase 2 interview as a family member. Participants were screened for family member problem gambling using a single item: 'In the last 12 months, has a family member had an issue with their gambling'. Participants who positively endorsed this item were asked to identify the family member/s with the gambling problem from an extensive list of immediate and extended family members.

Family violence victimisation and perpetration Modified versions of the Hurt-Insulted-Threaten-Screamed (HITS; Sherin et al. 1998) were used to measure the past-year prevalence of family violence victimisation and perpetration. The original 4-item HITS scale was modified to a single screening item for family violence victimisation: 'In

the past 12 months, has a family member physically hurt you, insulted or talked down to you, threatened you with harm, or screamed or cursed at you? Permission to modify the HITS for evaluating the participant's perpetration of violence towards family members was granted to the investigators by the author. This questionnaire was also modified to a single screening item for family violence perpetration: 'In the past twelve months, have you physically hurt, insulted or talked down to, threatened with harm, or screamed or cursed at a family member?' Participants who endorsed either one or both of the family violence questions were subsequently asked to specify the relevant family member(s) from an extensive list of immediate and extended family members.

Phase 2 interviews

Among other questions, the Phase 2 interviews included an open-ended question concerning the relationship between family member problem gambling and family violence for participants who reported both: "In what way are the aggressive behaviours and problem gambling related?" The Phase 2 interviews also included an open-ended question concerning gambling-related family impacts: "What impact do you think your family member(s) gambling has had on you and your family members?", and an open-ended question concerning their gambling-related coping strategies: "What strategies have you used to cope with your family member's gambling?"

Procedure

The current article reports data from a large-scale international study investigating the prevalence of problem gambling and family violence in help-seeking populations. The study was approved by the University of Melbourne Human Research Ethics Committee (project 0,838,146) and the Victorian Department of Justice Human Research Ethics Committees (project 1,119,644).

During Phase 1 of this project, 1030 new clients (i.e., any individual considered to be a new presentation by the relevant agency) from 17 participating programs at 11 treatment agencies (problem gambling, mental health, domestic violence, family support and substance abuse) across three Australian states (Victoria, South Australia, and Tasmania) were systematically screened for problem gambling, family member problem gambling, and family violence. Screening of consecutive cases was conducted for two to six months at each participating treatment agency, with the time frame being dependent on the agency's view as to how long they could sustain the extra effort involved in this data collection task. The screening questions were administered at the service site by agency staff and participant's responses were recorded on site and subsequently collected as hard copy by the researchers.

During Phase 2, in-depth interviews with 394 problem gamblers (212 in Australia and 182 in Hong Kong) and 137 family members (32 in Australia and 103 in Hong Kong) recruited from specialist problem gambling treatment agencies in Australia and Hong Kong were conducted. Phase 2 interviews included questions about participant and family member mental health, substance use, general health, gambling-related family impacts, and gambling-related coping strategies, as well as the open-ended questions described above. The length of the interviews ranged from 20 to 90 minutes with an average length of approximately 45 minutes. All interviews were conducted by researchers who had postgraduate training in clinical or educational psychology.

In this article, as previously noted, data from the Australian arm of the project only, is presented. This includes the family violence prevalence data for the family members of problem gamblers from Phase 1 (n = 120) and the qualitative responses relating to family impacts and coping for the family members of problem gamblers recruited into the Phase 2 interviews (n = 32).

Analyses

For Phase 1 data, chi-square tested for group differences in family violence victimisation and perpetration prevalence estimates. Adjusted residuals (*ASR*) above 2.0 and below-2.0 were employed to indicate significant deviations from the expected chi-square distribution. For Phase 2 data, a thematic analysis approach (Braun & Clarke, 2006) was used to identify common categories of response in the open-ended questions about the relationship between problem gambling and family violence, gambling-related family impacts and coping strategies. A preliminary coding scheme was established and the data were reviewed to ensure that all responses were consistently attributed to the categories. One author carried out the coding for the current themes and any dilemmas and the validity of outcome themes were resolved in discussions with the research team (Saldaña, 2009).

Results

Phase 1: prevalence of family violence

Of the 120 Phase 1 participants, 52.5% (n = 63) reported some form of family violence in the past 12 months: 20.0% (n = 24) reported only victimisation, 10.8% (n = 13) reported only perpetration and 21.6% (n = 26) reported both victimisation and perpetration of family violence. Table 2 shows that there were significant gender differences between the family violence groups ($X^2 = 17.61$, df = 6, p = .01), with more females in the 'victimisation only' group and more males in the 'no-violence' group than expected (2.0 < ASR).

Participants were able to report multiple family members in relation to the family violence questions. There were 94 perpetrators in total reported by 52 participants. Of these 94 perpetrators, 41 (43.6%) were problem gamblers. These 41 problem gambling perpetrators of family violence were mostly the participants' current live-in partner (n = 12; 29.2%), parents (n = 12; 29.2%), and ex-partners (n = 8; 19.5%). Smaller proportions were identified as children who could have been adult children (n = 3; 7.3%), extended family (n = 2; 4.8%), and siblings (n = 2; 4.8%). There were 70 victims of family violence reported by 42 participants. Of these 70 victims, 28 (40.0%) were problem gamblers. These problem gambling

Table 2 Distributions of victimisation and perpetration of family violence for males and females for 115 Phase 1 participants

	Phase 1 fa		
	Male (n = 55)%	Female (n = 60)%	All%
No FV	62 ^a	33 ^b	47
Only FV victimisation	7 ^b	32 ^a	20
Only FV perpetration	11	10	11
Both FV victimisation and perpetration	20	25	22
Total	100	100	100

Note: $^{a} = ASR > 2.0$; $^{b} = ASR < -2.0$.

Note: b = Five participants did not provide an answer.

victims were the participants' current live in partners (n = 8; 28.6%), parents (n = 7; 25.0%), ex-partners (n = 4; 14.2%), children (either young or adult) (n = 4; 14.2%), siblings (n = 3; 10.7%), and extended family members (n = 1; 3.6%).

Overall, 34.2% (n = 41) of participants reported any form of family violence towards or by at least one problem gambling family member in the past 12 months: 15.0% (n = 18) reported only victimisation by at least one problem gambling family member, 4.2% (n = 5) reported only perpetration towards at least one problem gambling family member, and 15.0% (n = 18) reported by victimisation and perpetration of family violence towards or by at least one problem gambling family member in the last 12 months.

Of the 120 Phase 1 participants, 65.0% (n = 78) also reported their own problem gambling as measured by BBGS. The frequency of family violence victimisation was not significantly different between participants who were problem gamblers (n = 37; 47.4%) compared to non-problem gamblers (n = 26; 33.3%) ($X^2 = 1.97$, df = 1, p = .18). The frequency of family violence perpetration was, however, significantly higher for participants who were problem gamblers themselves (n = 32; 41.1%) than participants who were not problem gamblers themselves (n = 15; 19.2%) ($X^2 = 6.01$, df = 1, p < .001).

Phase 2: patterns of family violence

Of the 32 participants who took part in Phase 2 interviews, 62.5% (n = 20) reported some form of family violence in the last 12 months: 15.6% (n = 5) reported victimisation only, 3.1% (n = 1) reported perpetration only, and 43.8% (n = 14) reported both victimisation and perpetration of family violence.

Family violence victimisation

Of the 32 participants, 19 (59.4%) reported family violence victimisation in the previous 12 months. Similar to Phase 1 screening, participants were able to report multiple family members in relation to the family violence questions. There were 38 perpetrators in total reported by 19 participants. Of these 38 perpetrators, 18 (47.4%) were problem gamblers. Of these 18 problem gambling perpetrators, 38.8% (n = 7) were live-in partners, 33.3% (n = 6) were ex- partners, 16.6% (n = 3) children or their children's partners, and 11.1% (n = 2) were parents.

Participants who were victims of family violence by a problem gambling family member (n=18) answered an open-ended question about the ways the problem gambling and family violence were related. Thirteen (72.2%) of the 18 perceived that the problem gambling and family violence was related and all 13 indicated problem gambling had preceded the family violence. Victimisation of participants by problem gamblers was most often attributed to financial losses, whereby fights ensued over money within the family:

"She [wife] gets very defensive about her gambling, becomes irritable and nasty if she had a big loss or if someone says something to her about her gambling. Always making excuses, not taking responsibility.", or

"He [husband] gets aggressive when he doesn't have money and loses his temper. When he loses money, he takes it out on his close ones", and

"When he's [husband] lost a lot of money and then comes home angry and gets it out on me."

One participant attributed verbal violence and conflict in her intimate partnership to her son's problem gambling: "We fight over our son's problems and gambling is one of them." Similarly, another participant described conflict with her sister over her mother's gambling:

"My sister is angry with me for continuing contact with mum. She thinks we should have nothing to do with her. She does not understand it is compulsive behaviour. She feels rejected by mum."

Participants who were victims of family violence by a problem gambling family member also mentioned confounding factors that exacerbated the relationship between family violence and problem gambling:

"The other way they are related is that he drinks when he gambles and becomes more aggressive", and

"When they get angry, they get very depressed and can't reach out to anyone else because they are so caught up in their own problems and narcissistic behaviours".

Family violence perpetration

Of the 32 participants, 15 (46.9%) reported family violence perpetration to one or more family members in the previous 12 months. The 15 participants reported violence to 24 family members, 11 (45.8%) of whom were problem gamblers. Of these 11 problem gambling victims, 5 (45.5%) were current partners and 6 (54.5%) were ex-partners. There were no immediate or extended family members such as in-laws, reported.

Among the 11 participants who were perpetrators of family violence towards a problem gambling family member, eight (72.7%) reported that the problem gambling and family violence were related. All eight participants indicated that problem gambling preceded the family violence. Aggressive behaviour was most often expressed as a consequence of feeling anger and mistrust:

"Only because of the gambling problem [of husband] makes me so angry and so I lash out", or

"He [ex-husband] destroyed the family with gambling and mistrust and I'm angry with him".

One participant reported displaced violence against her children as a response to her husband's gambling:

"Gambling plays a role because I'm angry at him and the aggression comes out in my relationship with my children".

Gambling-related family impacts and coping

To examine differences in gambling-related family impacts and coping strategies in the presence and absence of family violence, the 32 participants were placed into two groups: (1) participants who reported any form of family violence (n = 20); and (2) participants who did not report family violence (n = 12).

Family impact

In relation to the open-ended question regarding the family impacts of problem gambling, three categories of response captured all answers given by the participants (excluding answers: no/little impact; n = 3): (1) *financial impact* including lack of money, stealing, and theft; (2) *intrapersonal impact* including, stress, anxiety, and depression; (3) *interpersonal impact* including breakdown of a marriage or intimate relationship, trust issues, aggression, fights and the time spent gambling instead of with the family.

While all three impacts were relatively equally mentioned in both violence groups, participants who reported family violence (n = 20) were more likely to mention all three types of impacts in their comments:

"Financial impact, physical impact from family violence and emotionally when I'm trying to provide for our children, feeling helpless, angry and frustrated", and

"Very emotional issue, puts financial strain on us and is a source of arguments, my mother is heavily in debt", or

"Most of them don't know, my daughter has been borrowing money from me and gotten angry when I haven't given her money and abused me verbally".

In contrast, the impacts on the non-violence group (n = 12) were mostly centred around the one major issue of financial impact:

"Only financial impact, I had to always pay the bills, at the moment its good he [husband] has improved and we are both paying the mortgage",

Other impacts were reported:

"There is that lack of trust and feeling of anger, change in how we [husband] manage our life", and

"Emotional impact on my mum [about sisters gambling], anxiety, she's really stressed all the time and can't sleep".

As expected, the family violence group mentioned the aggression and conflict in relation to interpersonal impacts. However, in the non-violence group, the interpersonal impacts were mostly related to trust, lack of closeness and time spent together.

Coping strategies

In response to the open-ended question about gambling-related coping strategies, the responses were coded under four major themes reflecting strategies the participants used to cope with family member's problem gambling: (1) *financial control* including taking over the finances; (2) *supportive engagement* including talking, rationalising, giving advice; (3) *help-seeking* including support for the gambler to attend counselling; and (4) *avoidance and denial* such as keeping away from the gambler and doing their own thing.

There were no apparent differences in gambling-related coping strategies between the violence and non-violence groups. The most frequently reported strategies in both groups were related to financial control: "I don't let him [ex-husband] steal money from kids, look after your purse, don't put money lying around", or

"Try and collect her [mother] money from the machines, go to the venues and push the button and tell her to stop. I have noticed she always wants more and plays until she runs out of money".

Nearly as common were strategies involving supportive engagement: "We talk about it and make sure everything is on the table and out in the open", and "Talk to them [husband], sit them down and tell them it has to change". Also consistently mentioned in both groups were strategies related to help-seeking: "We've [with husband] been seeing a counsellor once a week and tried controlled gambling", "Self-excluded", and "Organised him [husband] to see a counsellor once a week".

In addition to the three themes involving engagement with the family member (financial control, supportive engagement, help-seeking), significantly less frequent in the responses were coping strategies of avoidance and denial: "Keep self away from him [brother]", "Try not to think about it and go into denial, thinking tomorrow will be a better day", and "Aversion, keeping away", or "Distraction from work".

Discussion

The first aim of the current article was to examine the occurrence and patterns of family violence in a group of help-seeking family members of problem gamblers. Consistent with the findings of previous research (e.g., Afifi et al., 2010; Bland et al., 1993; Echeburua et al., 2011; Korman et al., 2008; Liao, 2008; Lorenz & Shuttleworth, 1983; Raylu & Oei, 2007), the main results show a high occurrence of family violence in help-seeking family members of problem gamblers. In this study, over half of the family members of problem gamblers reported some form of family violence in the past 12 months and 34.2% reported that the family violence was perpetrated by or against at least one problem gambling family member. As noted in other studies, current and former partners were most often the victims and perpetrators of family violence (Cantos et al., 1994; Straus, 2008; Swan et al., 2008). The results also provide evidence of fairly high rates of family violence victimisation and perpetration in relation to the participants' parents that has not been previously explored in empirical research. Bidirectional violence was the most common form of violence in the sample, with 21.6% of participants reporting both victimisation and perpetration of family violence. However, female participants were more likely to be the victims of violence and were less likely to report no family violence in comparison to males. Interestingly, participants who reported their own problem gambling were more likely to be perpetrators, but not victims, of family violence suggesting that families where multiple members experience problem gambling are also more likely to be exposed to family violence.

A significant proportion of the reported family violence was related to the problem gambling of their family members. Participants reported that problem gambling and family violence were related in over 70% of their problem gambling family members. These findings are consistent with the findings of a North American study of female emergency department patients in which 64% of women with a problem gambling partner and experiencing intimate partner violence reported that there was a connection between the two (Muelleman et al., 2002). Findings of the current study also suggest

that problem gambling precedes both victimisation and perpetration of family violence. Victimisation was seemingly related to an immediate aggressive response to gambling losses by the problem gambler whereas perpetration against the problem gambler was related to underlying anger and mistrust. These results seem to support the hypotheses that problem gambling directly or indirectly leads to family violence perpetration by the problem gambler as a manifestation of financial stress and crisis within the home (Afifi et al., 2010; Korman et al., 2008; Muelleman et al., 2002) and that problem gambling directly or indirectly leads to family violence victimisation towards the problem gambler as a manifestation of family conflict related to stressors caused by problem gambling activity, such as lack of trust (Echeburua et al., 2011; Korman et al., 2008). However, the relationship between problem gambling and family violence (and other risk factors such as problem drinking) is complex (Muelleman et al., 2002; Raylu & Oei, 2007). As Lee (2012) found, in a case series analysis of couples in therapy, although an elevated risk of intimate partner violence involving physical and verbal aggression and sexual coercion was found with problem gambling, their temporal and causal link was not always clear. She noted that half the couples in this study reported episodic and at times prolonged emotional and physical abuse by their partners during their marriage before the onset of gambling, precipitated by conflicts unrelated to gambling, but also noted a recursive escalating pattern of couple turmoil following the onset of problem gambling. It is clear that the directionality and causal relationship between problem gambling and family violence is worthy of further investigation.

The second aim of the study was to qualitatively explore gambling-related family impacts and coping strategies in the presence or absence of family violence. Negative family impacts of problem gambling were consistent with the literature and included negative financial, interpersonal, and intrapersonal impacts (Dowling et al., 2009; Hodgins et al., 2006; Jackson et al., 1999; Kalischuk et al., 2006; Shaw et al., 2007). In comparison with the family violence group, participants who did not report family violence reported fewer negative impacts of problem gambling. These findings provide partial support for previous studies where multiple sources of negative impacts are associated with more distressed family environments (Black et al., 2006; Black et al., 2003; Harvey et al., 2007; Hodgins et al., 2007).

Family member coping strategies did not differ between those who experienced family violence and those who did not. The most common strategies family members reported were related to financial control and supportive engagement. Other studies also show family members of problem gamblers most often engage in controlling strategies, such as exercising control of the finances and searching for evidence of gambling (Krishnan & Orford, 2002; Orford et al., 2005). Although avoidance and withdrawal have been demonstrated in previous research on problem gamblers (Orford et al., 2005), they were the least commonly reported strategies in the current study.

A number of limitations of the current study made it difficult to address some of the underlying mechanisms that could explain the high occurrences of violence in families of problem gamblers. These include a small sample size, potential self-report measurement errors, and a cross-sectional design. In addition, the sample was primarily derived from a help-seeking population presenting to gambling-specific counselling services, with a smaller number recruited from family violence or family counselling services. There is currently not enough information on the latter group fort meaningful comparison to be made of the differences between these two help-seeking groups. The current study, however, provides evidence about the experiences of affected family members of problem

gamblers. It confirms the findings from previous studies about the co-occurrence of the two problematic behaviours-problem gambling and family violence-and is the first to empirically explore the relationship between these two problem behaviours.

Conclusion

The current study provides a snapshot of the intra-and interpersonal experiences of concerned family members of problem gamblers in the presence and absence of family violence. The evidence about the negative impacts of problem gambling on families is unequivocal and should be addressed in further research and clinical practice. The findings of the current study can be used to inform the treatment of problem gamblers and should be used to encourage routine screening for family violence in problem gambling services. The strain and burden of problem gambling on family members provides impetus for family-based approaches. While there are a number of descriptions of coupleoriented interventions for problem gamblers in the literature (Bertrand et al. 2008; Ciarrocchi, 2002; Lee, 2009), there has been to date, only limited testing of the effectiveness of these. One such analysis of intervention effects is Lee and Rovers (2008) report of the effects on 24 problem gamblers and their spouses of a Congruence Couples Therapy intervention (Lee, 2009). They found that there were significant improvements in a number of domains: problematic gambling behaviours (eg urge reduction); intrapsychic (eg self-awareness); interpersonal (eg communication and relationship improvement); inter-generational (eg insights into impact of family of origin on current behaviours); and 'spiritual' (eg compassion and hope). There has also been limited assessment of the effectiveness of family violence interventions (Stith et al. 2004). It is evident that the development of a rigorous evidence base for the efficacy of family and couples interventions for problem gambling is required.

Competing interests

The authors declare that they have no competing interests.

Authors' contributions

AJ, ND and ST designed the study; AS, TL, JP and SC were involved in data collection; AS project managed and led the data analysis. All authors contributed to and approved the final manuscript and all meet the NH & MRC guidelines for authorship.

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