The relationship of gambling to intimate partner violence and child maltreatment in a nationally representative sample

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ABSTRACT

It has been suggested that family violence is associated with gambling problems. However, to date, this relationship has not been thoroughly investigated using representative data. The purpose of the current study was to analyze the relationship between gambling problems and the perpetration and victimization of intimate partner violence (including dating and marital violence) and child maltreatment (including minor child assault and severe child abuse) using nationally representative data. Data were drawn from the US National Comorbidity Survey Replication ($n = 3334$; 18 years and older). Multiple logistic and multinomial logistic regression models were used to examine the relationships between gambling and the perpetration and victimization of dating violence, marital violence, and child maltreatment. The results indicated that problem gambling was associated with increased odds of the perpetration of dating violence (Adjusted Odds Ratios (AORs) ranged from 2.2 to 4.2), while pathological gambling was associated with increased odds of the perpetration of dating violence (AORs ranged from 5.7 to 11.9), severe marital violence (AOR = 20.4), and severe child abuse (AOR = 13.2). Additionally, dating violence, marital violence, and severe child abuse victimization were associated with increased odds of gambling problems. The results were attenuated when adjusted for lifetime mental disorders. These findings can be used as evidence-based research to inform healthy public gambling polices and inform prevention and intervention efforts.

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1. Introduction

From a public health perspective, it has been suggested that family violence and dysfunction are associated with gambling (Davis, 2002; Korn and Shaffer, 1999; Shaffer and Korn, 2002). Despite the worldwide growth of the gambling industry over the past several decades, very few studies have empirically investigated the potential relationship between gambling and family violence (e.g., intimate partner violence (IPV) and child maltreatment). It is reasonable to hypothesize that stress and financial crisis related to gambling problems may manifest within the home and result in the perpetration of violence against partners and/or children. Previous research has indicated that for some people, gambling is used as a way to escape reality (Berry et al., 2002; Boughton and Falenchuk, 2007; Crisp et al., 2004; Ledgerwood and Petry, 2006; Li,

2007; Walker et al., 2005). Therefore, it is possible that some victims of IPV or child maltreatment may use gambling as a coping mechanism.

The extant literature on the link between gambling and family violence is limited. An important shortfall of these studies is the narrow capacity in which family violence is assessed. For example, some studies have only investigated exposure to child abuse (Ciarrocchi and Richardson, 1989; Ibanez et al., 2003; Petry and Steinberg, 2005; Scherrer et al., 2007) or IPV (Liao, 2008; Muelleman et al., 2002). Other studies have used general abuse variables that do not distinguish between abuse occurring within childhood and adulthood (Kausch et al., 2006; Specker et al., 1996). Although some studies have assessed perpetration and victimization of IPV (Korman et al., 2008) or the perpetration of both spousal and child abuse (Bland et al., 1993), they have done so only in a descriptive manner.

What we have learned from the current body of research is that child abuse (Ciarrocchi and Richardson, 1989; Ibanez et al., 2003; Petry and Steinberg, 2005) and IPV (Muelleman et al., 2002) histories are common among pathological gamblers seeking help for treatment. For example, the odds of exposure to IPV were

extremely elevated among women presenting themselves to an emergency department (odds ratio = 10.5; 95% CI = 1.3–82) if the woman's partner was a problem gambler (Muelleman et al., 2002). Another study found that 64% of patients admitted to a gambling treatment program reported a history of abuse (Kausch et al., 2006).

The perpetration of IPV has also been commonly reported among pathological gamblers in a Canadian community sample (Bland et al., 1993). More specifically, 23% of pathological gamblers reported ever hitting or throwing objects at partners (Bland et al., 1993). This estimate is elevated compared to the lifetime prevalence of throwing an object (4.4% reported among men and 7.8% reported among women) or slapping or hitting (5.3% reported among men and 14.9% reported among women) a marital or cohabiting partner in an American community sample (Tjaden and Thoennes, 2000). Also, results of a cross-sectional study of a convenience sample suggest that the perpetration and victimization of IPV is prevalent among individuals with severe gambling problems; 62.9% reported being a perpetrator and/or victim of IPV (Korman et al., 2008).

What remains uncertain is whether the findings of higher prevalence of victimization and perpetration of IPV and child maltreatment among individuals with gambling problems extend to the general population since none of the articles to date have involved a nationally representative sample. Also, studies examining the relationship between gambling and IPV have not made the important distinction between dating violence and marital violence. Variations in the links between gambling and different types of intimate relationships are important to consider in determining specific approaches for violence prevention. Furthermore, many studies have only investigated the most severe type of pathological gambling and have not considered the importance of assessing variation in the severity of gambling including non-problem gambling, problem gambling, and pathological gambling. Understanding the relationship between a broad spectrum of gambling problems and various types of violence will have important public health implications. Finally, the current literature has not considered the potential role that mental disorders may play in understanding the relationship between gambling and the perpetration and victimization of IPV and child maltreatment. Since mental disorders are associated with gambling (Desai and Potenza, 2008; Kessler et al., 2008; Petry et al., 2005; Zimmerman et al., 2006) and the perpetration and victimization of IPV and child maltreatment (Afifi et al., 2006, 2008a,b; Choe et al., 2008; MacMillan et al., 1999, 2001), it is essential to consider their potential role.

The present research addresses many of the limitations in the existing literature on gambling and violence with the use of a nationally representative sample, the assessment of a spectrum of gambling problems, the inclusion of a wide range of interpersonal violence experiences (including the perpetration and victimization of dating violence, marital violence, and child maltreatment) and consideration of the role of mental disorders. More specifically, the purposes of the current research are to: (a) examine the relationship between increasing range of gambling problems and the perpetration of minor and severe dating violence, marital violence, and child maltreatment; (b) determine if mental disorders account for some of the variance between gambling problems and the perpetration of minor and severe dating violence, marital violence, and child maltreatment; (c) examine the relationships between minor and severe victimization of dating violence, marital violence and severe child abuse and a range of gambling problems; and (d) determine if mental disorders account for some of the variance between minor and severe victimization of dating violence, marital violence and severe child abuse across a spectrum of gambling problems.

2. Materials and methods

2.1. Sample

This study is based on data from the National Comorbidity Survey Replication (NCS-R) collected from 2001 to 2003 (Part II n = 5692; response rate = 70.9%) using a multistage clustered sampling design and face-to-face interviews (Kessler et al., 2005). Respondents were aged 18 years and older and were representative of the US population according to several census indicators (i.e., age, gender, race, education, marital status, region) (Kessler et al., 2003). The human subject committees from Harvard Medical School and the University of Michigan both provided ethical approval for recruitment and consent procedures, which included informed verbal consent from all participants (Kessler et al., 2003). More detail of the sampling procedures for the NCS-R has been described elsewhere (Kessler et al., 2004, 2005). Respondents who provided complete answers to the gambling questions in the survey were included in the current analysis (n = 3334).

2.2. Measures

2.2.1. Gambling problems

In the current study, lifetime gambling was defined using Diagnostic and Statistical Manual fourth edition (DSM-IV) criteria including the exclusion criterion of not meeting criteria for a diagnosis of bipolar I disorder (American Psychiatric Association, 1994). This coding replicates the gambling coding from an earlier publication on pathological gambling and mental health using the NCS-R data, which reported the prevalence of lifetime gambling as 78.4% with 2.3% being problem gamblers and 0.6% being pathological gamblers (Kessler et al., 2008). Gambling problems were assessed based on increasing number of DSM-IV symptoms. *Non-gamblers* included respondents who indicated that they had never engaged in gambling activities in their lifetime. *Non-problem gamblers* were individuals who endorsed gambling in their lifetime, but did not have any DSM-IV symptoms of pathological gambling. *Problem gamblers* were individuals who endorsed one to four pathological gambling symptoms. *Pathological gamblers* were individuals who endorsed five to ten pathological gambling symptoms, and did not meet criteria for bipolar I disorder.

2.2.2. Intimate Partner Violence (IPV)

Dating violence was assessed using several indicators of violence taken from the physical assault items of the Conflict Tactics Scales (CTS), a widely used, valid and reliable measure of family violence (Straus et al., 1996; Straus, 1979). Respondents were asked in how many dating relationships before the age of 21, had they ever done any of the following to their partner: pushed, grabbed, shoved, threw something, slapped, or hit. Those who endorsed committing these acts in one or more dating relationship were coded as perpetrators of minor dating violence. Respondents were then asked in how many dating relationships did their partners ever commit this acts listed above against them. Those who indicated experiencing these acts in one or more dating relationships were coded as victims of minor dating violence. Examining individuals who experienced two or more violent dating relationships as a separate group was not possible due to low cell counts.

Next, respondents were asked to indicate in how many dating relationships they had ever done the following to their partner: kicked, bit, hit with a fist, beat up, choked, burned, scalded, or threatened with a knife or gun. Individuals who endorsed committing these acts in one or more dating relationships were coded as perpetrators of severe dating violence. Respondents were then asked in how many dating relationships their partners ever