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# **Dating Violence in Relation to Problem Drinking and Risky Sexual Behaviors**

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#### Abstract

This research studied the associations between dating violence (perpetration & victimization), problem drinking and risky sexual behaviors. A correlation analysis was carried out using a representative sample of the young adult population (18 to 27 years old) of the United States, obtained in the named as Add Health study. This analysis was conducted separately for men and women. Participants reported on the frequency of victimization or perpetration of physical, sexual or verbal violence on their intimate partners during the last year, as well as about their alcohol consumption-related consequences during the same period of time. They also answered to questions regarding their age of sexual initiation, number of sexual partners, use of birth control methods and condom use consistency during the last year. Correlations among most of the variables of study resulted positive and significant, with some gender differences emerging. The level of consistency of these results with the literature on the topic is examined, and future lines of research are proposed for a better understanding of the relationship between these variables.

Keywords: dating violence; problem drinking; risky sexual behaviors; young adults.



#### Introduction

Dating violence is a type of intimate partner violence which occurs between two people in a close relationship. This concept captures three different types of violence: physical, psychological and sexual violence, as well as stalking (Centers for Disease Control and Prevention, 2012). The alarming dating violence prevalence rates presented in different epidemiological reports reflect the relevance of this phenomenon as a matter of concern at the public health level.

It is estimated that approximately 20-37% of dating couples in the United States have experienced some form of violence in their relationships (Cornelius & Resseguie, 2007; Rey Anacona, 2008). According to a recent nationally representative survey in this same country, more than 1 in 3 women (35.6%) and more than 1 in 4 men (28.5%) in the United States have experienced some sort of victimization, including rape, physical violence and/or stalking by an intimate partner in their lifetime. Furthermore, it is estimated that most female and male victims experienced some form of intimate partner violence for the first time before 25 years of age (CDC, 2010), making this an important population to research.

In a population of Canadian teenagers (12 to 18 years old), Sears, Byers & Price (2007) found that 43% of boys reported using either psychological, physical or sexual violence in the context of a romantic relationship, while the perpetration rates for girls were as high as 51%.

Many studies have identified possible consequences of dating violence, such as victims' reduced mental health and increased post-traumatic stress, lower self-esteem, depression, increased suicide attempts, poorer school performance, engagement in risky sexual behaviors, increases in eating disorders and substance use (CDC, 2012; Children's Safety Network, 2012; Offenhauer & Buchalter, 2011).

The present study examined two of the variables that have been associated to dating violence in a considerable number of studies: risky sexual behaviors and problem drinking



(alcohol-related negative consequences in relationships, social activities, work or school, as defined by the CDC in 2012). Dating violence has been consistently established in the literature as a risk factor for engagement in risky sexual behaviors, with mostly cross-sectional studies supporting this association (Gómez, 2011; Swan & O'Connell, 2011; Teitelman, Ratcliffe, Morales-Aleman & Sullivan, 2008). For example, teenage girls experiencing dating violence are more likely to engage in risky behaviors including sexual activity at a young age or having multiple sexual partners (Corporate Alliance to End Partner Violence, 2007; Dude, 2007; Gidycz, Orchowski, King & Rich, 2008). This relationship may be explained by a reduced sense of control, reduced self-efficacy (Carlson, 1997; Umberson, Anderson, Glick & Shapiro, 1998) and reduced ability to assess risks in the victims (Bolger, Patterson & Kupersmidt, 1998).

Recent research has also demonstrated that the occurrence of intimate partner violence is associated with less use of modern contraceptive (either oral, implanted and injectable contraceptives, intrauterine devices or female and male sterilization) (Gómez, 2011) and inconsistent condom use among women (Teitelman et al., 2008). One proposed mechanism underlying this association is a reduced control of women's sexual relationships and their condom negotiation ability (Buelna, Ulloa & Ulibarri, 2009; Swan & O'Connell, 2011).

Furthermore, studies focusing on dating violence perpetrators have described results that are consistent with the findings among victimized women. Frye et al. (2011) found that men who perpetrate intimate partner violence are significantly less likely to use condoms consistently with their main female partners. Similarly, in a study by Purdie, Abbey & Jacques-Tiura (2010) male perpetrators who forced their partners to have unprotected sex showed more acceptation of verbal pressure, higher rates of physical assault towards their partners and a higher frequency of causing physical injuries to their partners, compared to perpetrators who did not force their partners to engage in unprotected sex. Male adolescent dating violence perpetrators have also described high



levels of other risky sexual practices such as early initiation of sexual intercourse and multiple sexual partners (Raj et al., 2007).

A growing body of literature has also suggested the existence of an association between alcohol abuse and dating violence (Luthra & Gidycz, 2006; Shorey, 2010; Simons, Gwin, Brown & Bross, 2008; Stappenbeck & Fromme, 2010; Temple, Shorey, Fite, Stuart & Le, 2013).

In regards to perpetration, alcohol problems have been consistently associated with both male and female perpetration of dating violence (Baker & Stith, 2008; Shorey, Stuart & Cornelius, 2011). In a longitudinal study by Temple et al. (2013) results suggested that baseline alcohol use predicted the perpetration of physical dating violence 1 year later. Another longitudinal study found that higher rates of problem drinking among college students predicted perpetration of sexual aggression over a 3-month timespan (Gidycz, Warkentin & Orchowski, 2007). Also studying a sample of college students, Stappenbeck & Fromme (2010) found that heavy drinking predicted physical dating violence over the span of 3 years only for women, without differentiating between perpetration and victimization. Similar results were found in a longitudinal study by McNaughton Reyes, Foshee, Bauer & Ennett (2011) among early and middle adolescents (12 to 19 years old). In addition, in a study evaluating several risk factors for dating violence, Luthra & Gidycz (2006) found that alcohol use was the largest predictor for male dating violence perpetration and the second largest predictor for women.

Regarding the relationship between alcohol problems and dating violence victimization, although the findings in the literature are less consistent overall, there are several studies that support the relationship between these variables (Shorey, 2010; Temple & Freeman, 2011). Moreover, alcohol involvement of either one or both partners in a romantic couple has been found to increase the severity of intimate partner violence (McKinney, Caetano, Rodriguez & Okoro, 2010).



Furthermore, there is also evidence pointing to the relationship between problem drinking and risky sexual behaviors. In a nationally representative longitudinal study, Khan, Berger, Wells & Cleland (2012) found that adolescent alcohol indicators (such as past year history of getting drunk and past year consistent drinking) predicted adulthood inconsistent condom use for Whites and African-Americans. On the other hand, results of a cross-sectional study by Brown & Vanable (2007) showed that alcohol use was associated with sexual risk, but only for encounters with non-steady partners. Similarly, with a college student sample, Hittner & Kennington (2008) found that frequency of recent alcohol use positively predicted risky sexual behaviors such as inconsistent condom use and sex with someone just met. However, this relationship only resulted significant for women.

Other studies have highlighted the importance of alcohol-related beliefs in this association. A good example of this case is the research carried out by O'Hare (1998), where it was found that problem drinkers were more likely than non-problem drinkers to expect that drinking would enhance their sexuality and to engage in risky sex. Gender differences emerged, with young women more likely to refer to the sexuality-enhancing qualities of alcohol and young men more likely to actually engage in the risky sexual behavior.

The aim of the current study is to examine the relationship between problem drinking, dating violence and risky sexual behaviors among the young adult population in the United States. The association between these three variables has been approached in a few cross-sectional studies already (Alleyne, Coleman-Cowger, Crown, Gibbons & Vines, 2011; Raj et al., 2007). In a study by Simons et al. (2008) it was found that alcohol use was directly and intimate partner violence was indirectly related to risky sexual behaviors. However, to our knowledge, our study is the first to examine this relationship within a nationally representative sample. The nature of this work is exploratory; a correlation analysis will be conducted to find out whether the variables of study are related, expecting that these associations will be positive. Due to the gender differences found in the literature regarding



the association between these variables (Hittner & Kennington, 2008; Luthra & Gidycz, 2006), analyses will be conducted separately for men and women.

### Method

## Participants

The data for the secondary analysis was drawn from Wave III of the National Longitudinal Study of Adolescent Health (Add Health). Add Health provides measures on respondents' social, economic, psychological and physical well-being, along with contextual information on the family, neighborhood, community, school, friendships, peer groups and romantic relationships. Most of the interviews were conducted in respondents' homes and, to ensure confidentiality, no paper questionnaires were used. Respondents were asked to read and sign an informed consent form. The ones who accepted to participate received an incentive payment of \$20.

The first two Waves of the study were measured in 1994-1995 and 1996, respectively, when the participants were between 12 and 18 years old. Participants were selected from 80 high schools and 52 middle schools in the United States, ensuring the nationally representation of the sample, with respect to region of country, urbanicity, school size, school type and ethnicity. The data for Wave III, which was used in the current study, was collected in 2001-2002, re-interviewing 15,170 Wave I respondents when they were between 18 and 27 years old (Harris et al., 2009). The final analytical sample consisted on 2,332 participants, most of them (59%) between 22 and 24 years old (M = 22.12, SD = 1.695). The sample was diverse regarding both ethnicity and gender (43.7% male, 56.3% female). In addition, 23% of the respondents were married and 50% were cohabitating with their partners at the time of the last interview, while 31.8% were in relationships involving a pregnancy.



### Procedure

Only respondents who reported drinking alcohol and having vaginal intercourse in the past 12 months were included in the analysis. Furthermore, inclusion criteria for the study required that participants were currently engaged in a romantic sexual relationship that had lasted at least 3 months, with a person of the opposite sex and aged 18 years or older. Participants were asked to list all their romantic and sexual relationships since 1995 to the time of the interview in 2001-2002. As most of them (59.6%) reported on more than one relationship, it was necessary that they had classified their current relationship as the most important one. The importance of the relationship was evaluated with the following criteria: a current marriage was considered the most important one, followed by a current co-habitation, a current pregnancy relationship, a current long-term relationship and a current short-term relationship (Harris et al., 2009).

#### Measures

**Dating violence.** Two separate scales were constructed to measure dating violence perpetration and victimization, each of them consisting of four items and covering physical, sexual and verbal abuse. The perpetration scale included the following items, all of them referring to the past year before the interview: (1) "How often have you threatened your partner with violence, pushed or shoved him/her or thrown something at him/her that could hurt?"; (2) "How often have you slapped, hit or kicked your partner?"; (3) "How



often have you insisted on or made your partner have sexual relations with you when he/she didn't want to?"; (4) "How often has your partner had an injury, such a sprain, bruise or cut because of a fight with you?" The items in the victimization scale mirrored these ones, making the partner of the respondent the subject in the questions (for example, "How often has your partner threatened you with violence, pushed or shoved you, or thrown something at you that could hurt?"). Each item was rated on a 7-point scale, ranging from "never" to "more than 20 times", resulting in a scale that ranged from 0 to 28 for perpetration and in the same way for victimization. Logarithmic transformations were conducted due to the skewness in the distribution of the variable. The internal consistency for both scales was high,  $\alpha = .70$  for the perpetration scale and  $\alpha = .76$  for the victimization one.

*Problem drinking*. Consonant with past research studies evaluating the same variable in Add Health (Marmorstein, 2009; Maldonado-Molina, Reingle & Jennings, 2011), a scale consisting of 8 items measuring alcohol-use related problems was constructed. Each of following items was used to evaluate the frequency of occurrence of several consequences related to alcohol use in the last 12 months: (1) "You had problems at school or work because you had been drinking"; (2) "You had problems with your friends because you had been drinking"; (3) "You were hung over"; (5) "You were sick to your stomach or threw up after drinking"; (6) "You got into a sexual situation that you later regretted because you



had been drinking"; (7) "You got into a physical fight because you had been drinking"; (8) "You were drunk at school or work". Each item was rated in a 5-point Likert scale, ranging from "never" to "5 or more times", resulting in a scale that ranged from 0 to 40 points. Logarithmic transformations were also conducted due to skewness in the data. The internal consistency of the scale was high,  $\alpha = .729$ .

*Risky sexual behaviors.* A scale composed of different sexual behaviors increasing the risk for acquiring HIV/STI (Human Immunodeficiency Virus/Sexually Transmitted Infections) was first developed, but it showed low internal reliability, in accordance with prior research supporting the heterogeneity of these behaviors (Miller, 2000), thus warranting the need for an individual consideration of each of those sexual behaviors. The following risky sexual behaviors were assessed with a single item measuring each of them: early age at first time of vaginal intercourse, multiple sexual partners in the past year, birth control use and condom use consistency. For the first two items participants were asked to report the exact age when they first engaged in vaginal intercourse and the exact number of sexual partners in the past 12 months. The last two items measured birth control or pregnancy protection and condom use frequency (by respondents or their partners) in sexual experiences of the last year with a 5-point Likert scale, ranging from "none" to "all". A specific description of all the items used in this study is available online, in the Codebooks Add Health Questionnaire (http://www.cpc.unc.edu/projects/addhealth/codebooks).



#### Results

Pearson correlations were conducted to analyze the associations between dating violence perpetration/victimization, risky sexual behaviors and problem drinking. As it was previously mentioned, analyses were conducted separately for men and women.

First and consistent with the literature, a significant and positive association was found between dating violence perpetration and dating violence victimization for both men and women (r = .785, p<.001; r = .699, p<.001, respectively). Dating violence perpetration was also significantly and positively correlated with problem drinking for both male and female participants (r = .164, p<.001; r = .096, p<.001). Furthermore, a significant and positive correlation was also found between dating violence perpetration and early age at first time of vaginal intercourse for both men and women (r = .086, p<.01; r = .145, p<.001), indicative of higher scores in dating violence perpetration related to earlier sexual initiation. Similar results were found regarding lack of birth control use, as a significant and positive correlation was found between dating violence perpetration and this variable for both male and female participants (r = .111, p<.001; r = .204, p<.001). Interestingly, differences were found in the association between dating violence perpetration and lack of condom use for men and women, as the correlation between these two variables was significant and positive only for women (r = .141, p<.001), suggestive of higher scores in dating violence perpetration related to less reporting of condom use consistency.

In regards to dating violence victimization, and similarly as with dating violence perpetration, a positive and significant correlation was found between victimization and problem drinking for both genders (r = .156, p<.001; r = .114, p<.001). The relationship between dating violence victimization and early age at first time of sexual intercourse also yielded a positive and significant correlation for both men and women (r = .122, p<.001; r = .093, p<.001), higher scores in victimization indicating an earlier age of sexual initiation. Moreover, victimization was also positively and significantly correlated with lack of birth



control use for both male and female participants (r = .106, p<.001; r = 228, p<.001), indicative of higher scores in victimization related to less use of birth control methods. Lastly, differences emerged in the association between dating violence victimization and lack of condom use for men and women, similar to the results found between perpetration and this specific risky sexual behavior. The correlation between these two variables was only significant for women (r = .111, p<.001), indicating that higher scores in dating violence victimization were related to a lack of condom use consistency.

Lastly, regarding risky sexual behaviors, consistent with the literature on the topic most of the reported behaviors showed positive and significant associations. This was the case in the association between number of sexual partners and early age at first time of sexual intercourse for both men and women (r = .180, p<.001; r = .141, p<.001), indicative of a higher number of partners related to earlier sexual initiation. Similarly, early age at first time of sexual intercourse was positively and significantly associated with lack of birth control use for both genders (r = .121, p<.001; r = .161, p<.001), and the correlation between lack of birth control and lack of condom use yielded similar results for both men and women (r = .307, p<.001; r = .346, p<.001). Although the correlation between number of partners and lack of condom use was also significant, the relationship between these items was negative for both male and female participants (r = -.237, p<.001; r = -.114, p<.001), indicative of higher number of sexual partners reported related to more consistent condom use. Gender differences were found in two of the associations. Number of partners was significantly and positively correlated with lack of birth control, but only for women (r = .061, p<.05). In a similar way, the positive correlation between early age at first time of sexual intercourse and lack of condom use was significant only for women (r = .146, p<.001), showing that female participants with an earlier age of sexual initiation reported significantly less consistent condom use. In regards to the relationship with the problem drinking variable, number of partners showed a positive and significant correlation for both genders (r = .198, p<.001; r = .218, p<.001), while similar results were found between



problem drinking and early age at first time of sexual intercourse for both men and women (r = .05, p<.001; r = .087, p<.01). All other associations in the study were not significant (see Table 1 and Table 2 for a review of all the correlations).

# **Table 1.**Correlations Among Study Variables for Male Participants

	DV Perp <sup>a</sup>	DV Vict <sup>b</sup>	Number of	First time <sup>c</sup>	Problem	Lack of	Lack of
			Partners		Drinking	Birth Control	Condom use
DV Perp <sup>a</sup>	_						
DV Vict <sup>b</sup>	.785**	_					
Number of Partners	.021	.009	_				
First time <sup>c</sup>	.086**	.122**	.180**	_			
Problem Drinking	.164**	.156**	.198**	.079*	-		
Lack of Birth Control	.111**	.106**	.013	.121**	014	_	
Lack of Condom Use	.060	.059	237**	.060	038	.307**	_

*Note.* \**p* <.05, \*\**p* <.01

<sup>a</sup> Dating Violence Perpetration <sup>b</sup> Dating Violence Victimization <sup>c</sup> Early Age at First Time of Sexual Intercourse



# **Table 2.**Correlations Among Study Variables for Female Participants

	DV Perp <sup>a</sup>	DV Vict <sup>b</sup>	Number of Partners	First time <sup>c</sup>	Problem Drinking	Lack of Birth Control	Lack of Condom use
DV Perp <sup>a</sup>	_						
DV Vict <sup>b</sup>	.699**	-					
Number of Partners	.037	.039	_				
First time <sup>c</sup>	.145**	.093**	.141**	-			
Problem Drinking	.096**	.114**	.218**	.087**	_		
Lack of Birth Control	.204**	.228**	.061*	.161**	003	_	
Lack of Condom Use	.141**	.111**	114**	.146**	013	.346**	_

*Note*. \**p* <.05, \*\**p* <.01

<sup>a</sup> Dating Violence Perpetration <sup>b</sup> Dating Violence Victimization <sup>c</sup> Early Age at First Time of Sexual Intercourse

#### Discussion

It is necessary to improve our understanding of the different variables associated with dating violence among adolescents and young adults in order to establish effective prevention measures. Identifying the several risk factors related to the involvement in an abusive relationship, as well as the possible individual, and interpersonal consequences of such relationships is a challenging task. The present study aimed to contribute with new



data in this regards, examining the association between dating violence, problem drinking and risky sexual behaviors among young adults in the United States.

Results of the study showed that most of the variables were positively and significantly correlated for both genders. Dating violence (both perpetration and victimization) was associated with problem drinking, early age at first time of sexual intercourse and lack of birth control use for both men and women. These findings are consistent with existing literature on the different variables linked with dating violence. Previous studies had already found associations between dating violence and problem drinking (Gidycz et al., 2007; Luthra & Gidycz, 2006; Temple & Freeman, 2011) and between dating violence and early sexual initiation (CAEPV, 2007; Gidycz et al., 2008) as well as between dating violence and lack of birth control use (Gómez, 2011).

Interestingly, evidence of gender differences was found in the association between dating violence (perpetration and victimization) and inconsistent condom use. Although the relationship was positive for both male and female participants, the correlation was only significant for women, meaning that higher engagement in dating violence among women was related with more inconsistent condom use. Possible explanations for these results may be found in the theories of gender and power, which propose that power inequities in relationships may decrease some women's condom negotiation ability or self-efficacy (Buelna et al., 2009; Swan & O'Connell, 2011). Empirical support for this theoretical approach was found in several studies; for example, Filson, Ulloa, Runfola & Hokoda



(2010) found that, as women reported experiencing more violence within their intimate relationships, they reported less power, thus reducing their condom negotiation ability. Furthermore, this explanation is also applicable to the female perpetration cases, but necessarily considering the concept of reciprocity in the aggression. Reciprocal aggression has been found consistently in the dating violence literature as equally or even more prevalent than non-reciprocal one (O'Leary, Slep, Avery-Leaf & Cascardi, 2008; Testa, Hoffman & Leonard, 2011; Whitaker, Haileyesus, Swahn & Saltzman, 2007). In fact, the high positive correlation found in our study between dating violence perpetration and victimization seems to point in this direction too. It could be hypothesized then that female dating violence perpetration doesn't necessarily bring her sexual relationship power, as she would also often be victimized in the relationship, but empirical support would be needed to determine if that is actually the case.

Regarding the relationship between problem drinking and risky sexual behaviors, there was no association with lack of birth control use and lack of condom use. However, problem drinking did show a positive and significant correlation with early age at first time of sexual intercourse and number of sexual partners. As for the early sexual initiation variable, although the obtained effect size is small, this significant association with problem drinking is consistent with the existing literature on the topic (Ferguson & Lynskey, 1998; Sandfort, Orr, Hirsch & Santelli, 2008; Paul, Fitzjohn, Herbison & Dickson, 2000). On the other hand, the association between problem drinking and number



of sexual partners during the last year yielded a bigger effect size. These findings help to reinforce the empirical work carried out in several studies with similar results (Blinn-Pike, Berger, Hewett & Oleson, 2004; Dogan, Stockdale, Widaman & Conger, 2010; Guo et al., 2002; Guo et al., 2005) and suggest the need of progressing in the search of the causal explanations that underlie this association.

In fact, many different theoretical frameworks have been considered in the study of the interaction between alcohol and sexual behavior. One of the existing lines of work on this topic refers to the alcohol myopia theory. This theory, originally proposed by Steele & Jones in 1990 (as cited in Dogan et al., 2010), postulates that alcohol consumption negatively affects cognitive abilities to process and discriminate between stimuli or cues to behavior, thus leading to disinhibited behavior. Another approach to this relationship is the alcohol expectancy theory presented by Lang in 1985 (as cited in Dogan et al., 2010), which tries to find an explanation in the pre-existing beliefs or expectations individuals hold about the effects of alcohol use on their sexual behavior, such as its sex-enhancing effects (O'Hare, 1998; Patrick & Maggs, 2009). However, due to the mixed results obtained in our study regarding the association between problem drinking and risky sexual behaviors, it seems difficult to draw any relevant conclusion on this issue. There probably are third variables that need to be taken into account in future research as mediators in this relationship.



Regarding the relationship between the different risky sexual behaviors, there is one seemingly surprising finding that is worth commenting. Contrary to expectations, number of partners was negatively associated with lack of condom use for both men and women, meaning that a higher number of sexual partners in the last year was indicative of a more consistent condom use. Nevertheless, there is literature supporting this finding. Fortenberry, Tu, Harezlak, Katz & Orr (2002) found higher rates of condom use in relationships with less than 21 days of duration, compared to more established relationships. Similar results were found by Gebhardt, Kuyper & Greunsven (2003), showing that condoms were more consistently used with casual partners than with a steady partner. Participants from that study who had unprotected sex with their steady partners reported that they did not use a condom because they were employing other methods to prevent contraception, such as the pill. Another reason for the lack of condom use given by the participants in the study by Gerbhardt, Kuyper & Greunsven was that the relationship had already existed for a longer period of time, making adolescents less inclined to protect themselves from STIs. These explanations find some consistency in the results of our study showing that a lower number of partners is positively associated with more birth control use among women.

However, the assumption behind this reasoning is that in our study a lower number of sexual partners would be indicative of a longer duration of these relationships (perception



of the partner as a steady one). An actual statistical analysis taking into account the length of the relationships in our study would be needed to fully support this statement.

Although this study provided some important new information on this field of work, these findings should be viewed with caution in light of a few limitations. First, the measures used in this study were self-report, which may have lead to an underreporting of the variables of study, due to the sensitive nature of the questions asked to the participants. This was taken into account in the Add Health study design, as for the Wave III data collection the interviewer administered the in-home interview (CAPI) with sections containing more sensitive questions asked in a self-administered portion (Harris et al., 2009), but the accuracy of some of the reported answers (such as age at first time of sexual intercourse or inflicted injury in a partner) may still have been reduced. The application of multiple methods of measurement and the assessment of several other information sources would be appropriate for future studies.

Second, another limitation of the current study lies in the cross-sectional nature of the data collected. Although Add Health is a longitudinal study with four waves of interviews, the analysis for the current study was carried out only with information from Wave III (collected in 2001-2002 with respondents aged between 18 and 27 years old). This circumstance makes it impossible to determine temporal sequencing or causality among the variables studied. Furthermore, the small to medium effect sizes obtained in this study may be indicative of the existence of other variables mediating the relationship between



problem drinking, dating violence and risky sexual behaviors, which would allow for further studies to try shedding some light on the complexity of these associations.

Third, measurement imprecisions may exist regarding the assessment of dating violence perpetration and victimization. Although physical, sexual and verbal abuse were covered in the measure of dating violence, both the perpetration and the victimization scales consisted on just four items, probably leaving several key features of dating violence under-assessed. Furthermore, different types of dating violence were not separately evaluated. Physical, sexual and psychological dating violence have shown different prevalence rates in the literature, as well as distinct mechanisms underlying their appearance, calling for an independent study of each of them (Offenhauer & Buchalter, 2011).

Fourth, an additional limitation may be related to the selection of the most important relationship reported by the participants for the analysis. The criteria used in the Add Health study in this regards considers a current marriage as the most important relationship, followed by a current co-habitation, a current pregnancy relationship, a current long-term relationship and a current short-term relationship. Our specific inclusion criteria required that participants were currently engaged in a romantic sexual relationship that had lasted at least 3 months, with a person of the opposite sex and aged 18 years or older. However, this criterion doesn't consider the possibility that respondents may have had other relationships that ended quickly because of relationship aggression, thus not



being included in the analysis. Therefore, some relevant information on dating violence may have been lost in our study.

Despite the mentioned limitations, mostly pertaining assessment methods and measures, this study contributes with some information relevant to this field of research. A nationally representative sample from the young adult population in the United States was used, whereas most of the previous studies on this area have been conducted with geographically specific populations. This strengthens the external validity of the findings, that is, our ability to generalize our results to other population groups within the United States.

The present study can serve as a starting point for future research looking at the interaction between dating violence, problem drinking and risky sexual behavior. Follow-up studies should address the mentioned limitations of the present work and help expanding the knowledge about dating violence and its correlates. For example, sexual attitudes, beliefs and behavior of peers were not considered in this analysis and they may play a significant role in the engagement on risky sexual behaviors. Further research could also take into account several other influencing factors when studying dating violence, such as motives, meaning or context of aggression. Event specific research can provide as a better understanding of the co-occurrences among these variables, also helping us develop more effective prevention programs.

Furthermore, additional research is needed on the temporal sequencing or causality of the studied variables. If results in the same direction as the present study were obtained in that



future research, important implications for the treatment and prevention of dating violence in the United States may arise. Thus, future prevention efforts could consider problem drinking and risky sexual behavior as two possible correlates of dating violence among the young adult population. Relationship power dynamics, reciprocal aggression or alcoholrelated expectancies are several concepts that have been particularly highlighted as relevant in this study and that should receive attention in further studies in order to evaluate the need of their inclusion in prevention programs. Additionally, it would be appropriate to conduct more research on the gender differences in the associations between these variables, with the aim of deciding on the consideration of gender-specific intervention strategies.

Finally, findings from this study can also suggest the need for researching the relationship between the studied variables with other population groups, with respect to age, sexual orientation or geographical setting. In fact, doubts may arise regarding the generalizability of these results to other cultural contexts outside of the United States. Therefore, replication of this study in different countries will help bringing a more global understanding of dating violence and could be useful for the creation culturally sensitive interventions.



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