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THE RELATION BETWEEN ALCOHOL USE AND PSYCHOLOGICAL, PHYSICAL, AND SEXUAL DATING VIOLENCE PERPETRATION AMONG MALE COLLEGE STUDENTS

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Abstract

The prevalence of alcohol use and dating violence are shockingly high among male college students, making this a particularly high-risk group for alcohol-related aggression. Expanding upon previous research, the current study examined the relations between three indicators of alcohol use and three types of dating violence among 204 male college students. We also examined whether hazardous drinkers reported more violence perpetration than non-hazardous drinkers. Results demonstrated that alcohol use was related to all types of aggression, and hazardous drinkers are at greater risk for violence perpetration than non-hazardous drinkers. Implications for dating violence prevention programs and future research are discussed.

Keywords

Alcohol; dating violence; perpetration; men

The association between alcohol use and aggressive behavior is undeniable. There is a considerable body of research demonstrating that alcohol use increases the risk for aggressive behavior across a broad range of populations. It has been proposed that alcohol use creates a myopic effect, facilitating aggressive behavior due to an increased focus on negative, aggressive cues while intoxicated (Chermack & Giancola, 1997; Giancola, 2002; Steele & Josephs, 1990). In recent years, there has been a wealth of research on the relation between alcohol use and aggression against intimate partners (e.g., Foran & O’Leary, 2008; Rothman et al., 2011; Shorey, Stuart, & Cornelius, 2011; Stuart, O’Farrell, & Temple, 2009), with findings generally demonstrating that alcohol use is positively associated with aggression against an intimate partner. However, continued research is needed on the relation between alcohol use and aggression against intimate partners, particularly among populations known to be at high risk for both alcohol consumption and aggressive behavior.

The current study examines the relation between alcohol use and dating violence perpetration among male college students.

Alcohol and Male College Students

It is well established that male college students consume large quantities of alcohol and are at risk for alcohol use disorders and negative consequences associated with alcohol use. For instance, 82% of college students have tried alcohol in the past year and 37% engage in heavy or binge drinking, defined as the consumption of five or more drinks in a row (Johnston, O'Malley, Bachman, & Schulenberg, 2011). Additionally, college students consume more alcohol than their non-college peers and males consume more alcohol than females (Johnston et al., 2011). Approximately 30% of college males consume more than 20 drinks of alcohol each week (Ham & Hope, 2003). It is estimated that approximately 35% of male college students meet diagnostic criteria for alcohol abuse or dependence (Knight et al., 2002). Moreover, approximately 50% of college students can be classified as "hazardous" drinkers (DeMartini & Carey, 2010), or individuals who consume alcohol at a level that increases risk for harmful consequences (Saunders et al., 1993). Alcohol use among male college students has been associated with a wealth of negative consequences, including injuries, problems with schoolwork, involvement in sexual assaults, a variety of legal issues, and many others (Ham & Hope, 2003).

Dating Violence and Male College Students

Dating violence, consistent with alcohol use, is alarmingly common among male college students. Research has demonstrated that the prevalence of psychological aggression against a dating partner in the previous 12 months is approximately 80%, the past year prevalence of physical aggression is 20–30%, and the past year prevalence of sexual aggression is 20% among male college students (Shorey, Cornelius, & Bell, 2008). When more severe forms of dating violence are examined (e.g., punching or kicking one's partner; using force to have sexual intercourse), prevalence rates for the previous 12 months are approximately 25% for psychological aggression, 10% for physical aggression, and 6% for sexual aggression (Bell & Naugle, 2007; Hines & Saudino, 2003). In addition, by the end of college, approximately 80% of female students will have experienced at least one act of physical or sexual aggression from an intimate partner (Smith, White, & Holland, 2003). Victims of male perpetrated dating violence are at an increased risk for experiencing a number of negative health symptoms, including depression, anxiety, and somatic complaints (Katz & Arias, 1999; Kaura & Lohman, 2007; Prospero, 2007; Shorey, Sherman, et al., 2011), to name only a few. Thus, it is clear that male perpetrated dating violence is a serious and prevalent problem.

Alcohol and Dating Violence

Shorey and colleagues (2011) recently reviewed the literature on alcohol use and dating violence perpetration among college students. Their review demonstrated that there is a consistent association between alcohol use (and alcohol-related problems) and physical aggression perpetration among male college students. While the majority of studies have been conducted examining the alcohol-physical aggression relation, there is a growing body

of research showing a positive association between alcohol use and psychological aggression perpetration. Shorey and colleagues (2011) concluded that binge drinking, alcohol problems, and frequency of alcohol use are all associated with increased risk for dating violence perpetration. In a recent study utilizing a daily diary, longitudinal design, Moore, Elkins, McNulty, Kivisto, and Handsel (2011) demonstrated that the odds of perpetrating physical and psychological aggression were higher on drinking days relative to non-drinking days among male college students. Moore and colleagues (2011) concluded that their study adds to a growing body of evidence that alcohol may be causally linked to violence against intimate partners for some perpetrators.

While research has generally demonstrated a significant relationship between alcohol use and male perpetrated dating violence, there are a number of methodological limitations of previous studies that can be addressed. First, the majority of studies examined only one type of dating violence, or combined types of dating violence, and not all three (psychological, physical, and sexual) separately as related to alcohol use in the same study. In addition, there is a dearth of research on the relation between alcohol use and different severity levels of dating violence. Researchers commonly classify the distinct types of aggression into *minor* and *severe* forms (e.g., Straus, Hamby, Boney-McCoy, & Sugarman, 1996), and it is unclear whether alcohol use is related to both minor and severe forms of psychological, physical, and sexual dating violence perpetration. Severe aggression is often classified as aggression that poses a greater risk for bodily and emotional harm or injury, whereas minor aggression has a lower risk for bodily and emotional harm or injury (Straus et al., 1996). There is also a lack of studies that have examined multiple indices of alcohol use as related to dating violence within the same study. Finally, research that controls for relevant demographic characteristics while examining the relation between alcohol use and dating violence is lacking. For example, research has demonstrated that increased relationship length is related to increased risk of dating violence perpetration (Marcus & Swett, 2002), and individuals are at greatest risk for violence between the ages of 15–25 (O’Leary, 1999). Additionally, there is research that suggests that the second year of college may be the time when risk for violence peaks (White & Smith, 2009). Thus, it is important for research to control for these demographic and relationship characteristics when examining the alcohol-dating violence relation.

Current Study

Building upon previous research, we examined the relation between alcohol use and dating violence perpetration. Specifically, we examined whether reports of overall alcohol problems, the largest number of drinks consumed on one occasion, and frequency of intoxication were related to psychological, physical, and sexual dating violence perpetration. We also examined whether hazardous drinkers reported more dating violence perpetration than non-hazardous drinkers after controlling for relevant demographic and relationship characteristics. Based on theory and previous research, we hypothesized that all three indicators of alcohol use would be associated with all three types of dating violence perpetration. It was also hypothesized that hazardous drinkers would report more frequent aggression perpetration than non-hazardous drinkers. We expected these hypotheses to be supported for both minor and severe forms of dating violence perpetration.

METHOD

Participants

Participants were 204 male undergraduate college students from a large southeastern university. The mean age of participants was 18.91 ($SD = 1.98$). Academically, the majority of students were Freshmen (74.8%), followed by Sophomores (17.5%), Juniors (4.4%), and Seniors (3.4%). Ethnically, the majority of students were non-Hispanic Caucasian (88.3%), followed by Asian-American (4.4%), African American (3.4%), Hispanic (2.4%), and “other” (e.g., Indian; 1.5%). At the time of the study 68.4% of students were not in a current dating relationship, while the remainder of students were in a current dating relationship. The average length, in months, of current dating relationships was 7.84 ($SD = 9.49$). The majority of students had at least one dating partner in the previous 12 months (57.3%), while the remainder had two or more dating partners in the previous 12 months. The majority of students categorized themselves as heterosexual (94.7%).

Procedure

Students were recruited through an online survey website used specifically by the psychology department at the university where the study was conducted. All students in introductory psychology classes can participate in research to earn course credit. Students read a brief description of the current study, which indicated that they must be 18 years of age or older to participate and that they would be asked to answer questions about themselves and their intimate relationships. If interested in the study students were instructed to follow a web-link that took them to a secure survey website to complete a set of questionnaires. Students provided informed consent and then completed the measures described below. Upon completion of the questionnaires, students were provided with a list of local referral sources for domestic violence, counseling, and substance use. All procedures were approved by the university’s Institutional Review Board (IRB).

Measures

Demographics—Students were asked to indicate their age, race, academic level, sexual orientation, relationship status, and relationship length (if applicable).

Alcohol—The Alcohol Use Disorders Identification Test (AUDIT; Saunders, Asaland, Babor, de la Fuente, & Grant, 1993) was used to examine alcohol use in the previous 12 months. The AUDIT assesses the frequency and intensity of alcohol use, symptoms that are characteristic of dependence and tolerance, and consequences of alcohol use. The AUDIT has been shown to be superior to other measures of alcohol use for alcohol problem screening (Reinert & Allen, 2002). In addition, the AUDIT can classify individuals into hazardous or harmful drinkers, which involves obtaining a score of 8 or greater (Saunders et al., 1993). The AUDIT has demonstrated good reliability and validity. For the current study, the internal consistency (α) of the AUDIT was .87.

In addition to the AUDIT, we included two additional questions to examine participants’ alcohol use that have been used in previous research (Stuart, Moore, Ramsey, & Kahler, 2004). First, we asked participants to indicate the largest number of standard drinks (e.g., a

12 ounce beer) they consumed on a single occasion in the previous 12 months. The second question, designed to examine perception of how often intoxication occurred due to alcohol use, asked students to indicate how often during the previous 12 months that they became “intoxicated or drunk” from drinking alcohol. Students were provided with response options of “never”, “less than monthly”, “about once a month”, “several times a month”, “1–2 days a week”, “3–4 days a week”, “5–6 days a week”, and “every day.”

Dating Violence—The Revised Conflict Tactics Scales (CTS2; Straus et al., 1996) was used to examine psychological, physical, and sexual dating violence perpetration. Students used a 7-point scale ($0 = \text{never}$; $6 = \text{more than 20 times}$) to indicate how frequent each act of aggression occurred during the previous 12 months with their current, or most recent, dating partner. Scores are obtained by taking the mid-point for each response (e.g., a “4” for the response “3–5 times”) and summing all items for each scale, with each item ranging from 0–25 (Straus, Hamby, & Warren, 2003). Thus, higher scores on the CTS2 correspond to more frequent aggression perpetration. Additionally, each type of aggression can be divided into minor and severe subscales. The CTS2 is the most widely used measure to examine violence perpetration in intimate relationships and has demonstrated good reliability and validity (Straus et al., 2003). For the current study, internal consistency (α) estimates were .77 for psychological aggression, .79 for physical aggression, and .60 for sexual aggression. Prior studies have removed a specific item from the sexual aggression subscale of the CTS2 (i.e., “made my partner have sex without a condom”; e.g., Shorey, Sherman, et al., 2011) because some participants vary in their use of birth control (Marshall & Holtzworth-Munroe, 2002). With this item removed, internal consistency for the sexual aggression subscale increased to .70, and this version of the sexual aggression subscale was used for all analyses.

RESULTS

All analyses were conducted using SPSS version 18.0. Prior to conducting analyses, all of the CTS2 subscales (minor, severe, and total scores) were log-transformed to reduce positive skew and kurtosis. First, we examined bivariate correlations among study variables. These results are presented in Table 1. The AUDIT was positively and significantly associated with each form of aggression, including minor and severe forms. The strongest correlations were between the AUDIT and the total and minor sexual aggression scores. Reports of frequency of intoxication were positively associated with each type of aggression, including minor and severe forms. Again, the strongest correlations were between frequency of intoxication and the total and minor sexual aggression scores. In addition, the largest number of drinks on one occasion was associated with increased psychological and sexual aggression (total score and minor severity).

Next, we examined whether participants in a current dating relationship varied from individuals not in a current dating relationship on the variables of interest. Independent sample t tests demonstrated that the groups differed on the total score for psychological aggression perpetration, $t(191) = 2.96, p < .01$, and minor severity for psychological aggression perpetration, $t(191) = 3.04, p < .01$. In both cases, individuals in a current dating relationship reported more frequent perpetration in the previous 12 months. Across the entire

sample, the prevalence rates of each type of aggression were: 54.9% (psychological aggression), 53.4% (minor psychological aggression), 19.9% (severe psychological aggression), 18.9% (physical aggression), 17.5% (minor physical aggression), 9.7% (severe physical aggression), 24.3% (sexual aggression), 23.8% (minor sexual aggression), and 7.3% (severe sexual aggression).

We also classified individuals into hazardous and non-hazardous drinkers based on the standard cutoff score on the AUDIT (i.e., 8). The majority of students did not meet the cutoff score for hazardous drinking (62.4%), although more than one-third of the sample did (37.6%). The majority of students (69.2%) did indicate that they had consumed alcohol in the previous 12 months. In addition, the mean number of drinks consumed on the largest drinking day in the previous 12 months was 7.56 ($SD = 7.07$; Range = 0–30). For frequency of intoxication in the previous 12 months, 40.4% reported never becoming intoxicated, 19.2% less than monthly, 9.1% about once a month, 13.1% several times a month, 14.6% 1–2 days a week, 2.5% 3–4 days a week, and 1% became intoxicated 5–6 days per week.

Finally, we examined whether hazardous drinkers reported more dating violence perpetration than non-hazardous drinkers while controlling for relevant demographic characteristics (See Table 2). We conducted Analyses of Covariance (ANCOVAs), with age, academic level, relationship status, and relationship length entered as covariates. These results are presented in Table 2. As displayed, hazardous drinkers reported more frequent aggression perpetration than non-hazardous drinkers on every CTS2 subscale with the exception of severe sexual aggression perpetration, which was not different between the groups. The majority of effect size differences between groups fell in the small-to-medium range (Cohen, 1988). Relationship length and academic level were unrelated to aggression perpetration. Age was only associated with psychological aggression (total and minor), such that being older was associated with increased perpetration.¹

DISCUSSION

The relation between alcohol use and male perpetrated dating violence is increasingly clear (Shorey, Stuart, et al., 2011); however there is a continued need to examine the relation between different indicators of alcohol use and different types and severity levels of dating violence. Therefore, the current study expanded upon previous research by examining the relation between three indicators of alcohol use and three types of dating violence perpetration, and whether hazardous drinkers report more violence perpetration than non-hazardous drinkers, even after controlling for relevant demographic and relationship characteristics. In addition, the current study is one of the only studies to examine the relation between alcohol use and different severity levels of dating violence perpetration. Overall, findings largely supported our hypotheses that increased frequency and severity of alcohol use would be associated with increased dating violence perpetration.

¹Due to the lack of significance of covariates in predicting aggression, these results are not presented. The full output is available from the first author upon request.

Our first hypothesis stated that alcohol use, as indexed by all three measures of use, would be associated with all forms of aggression, including minor and severe forms. Indeed, alcohol use, operationalized by scores on the AUDIT and frequency of intoxication, was positively associated with all forms of dating violence. While this is consistent with previous research (Shorey, Stuart et al., 2011), importantly these are some of the first findings to demonstrate this relationship between different severity levels of dating violence. Thus, while these findings should be considered preliminary until they are replicated, they provide some evidence of a malleable risk factor for engaging in both minor and severe forms of dating violence. Unfortunately, the lack of research on risk factors for different severity levels of dating violence makes it difficult to know whether other factors may increase one's risk for severe forms of violence to a greater extent than alcohol use, or whether alcohol interacts with negative situational factors (e.g., negative affect) to increase risk for severe forms of aggression. Future research should examine these possibilities.

Our second hypothesis, that individuals meeting the cutoff score for hazardous or harmful drinking on the AUDIT would report more frequent aggression perpetration than non-hazardous/harmful drinkers, was supported. In fact, with the exception of severe sexual aggression, which was rarely endorsed, hazardous drinkers reported more frequent perpetration on every CTS2 subscale. This finding is important for a number of reasons. First, it provides additional evidence that problematic alcohol use is associated with a number of distinct forms of aggression. Second, it suggests that hazardous drinkers may be an at-risk group that could be targeted in dating violence prevention programs due to their increased aggression risk. In order to increase their effectiveness, researchers have discussed how dating violence prevention programs should target individuals who are at high-risk for engaging in aggression (Shorey, Cornelius, & Idema, 2011). Screening students for hazardous drinking could provide researchers with a group of students who are at risk for aggression, and would allow for tailored interventions that are designed to target the relation between alcohol and dating violence.

While the current study provides important information on the relation between alcohol use and dating violence perpetration, there is a need for research that examines variables that may moderate the relation between alcohol use and aggression. Not everyone who consumes alcohol will become aggressive toward their dating partner, and it is likely that certain situational and dispositional factors moderate the alcohol-aggression relation. For instance, it has been theorized that under conditions of negative affect (i.e., anger, stress, frustration) alcohol will be more strongly associated with aggression (e.g., Leonard, 1993). In addition, it is well-known that alcohol expectancies, i.e., individuals' beliefs regarding what will happen when they are under the influence of alcohol, plays an important role in alcohol-related behavior. For instance, research has demonstrated that the relation between alcohol and dating violence perpetration is stronger among college men who held more favorable beliefs toward the effects of alcohol on aggression (Fossos, Neighbors, Kaysen, & Hove, 2007). Unfortunately, this study combined psychological, physical, and sexual aggression into a composite "perpetration" indicator, and did not examine minor or severe forms of aggression. Additional moderating factors in the relation between alcohol use and dating violence perpetration may include emotion regulation, psychological disorders (e.g., depression, PTSD), personality characteristics, and negative relationship characteristics

(e.g., relationship satisfaction). Thus, additional research is needed that examines moderating factors in the relation between alcohol use and all three forms of dating violence, including minor and severe violence.

Implications for Prevention Programs

The current study, in combination with previous research, has important implications for dating violence prevention programs. Surprisingly, dating violence prevention programs with college students have largely ignored targeting and modifying alcohol use (Cornelius & Resseguie, 2007; Roudsari, Leahy, & Walters, 2009; Shorey, Rhatigan, Fite, & Stuart, 2011; Shorey, Stuart, et al., 2011). The primary focus of these programs has been on modifying attitudinal variables associated with violence (i.e., beliefs about the acceptability of violence), which has not demonstrated effectiveness in reducing violence (see Cornelius & Resseguie, 2007 for review). Therefore, additional targets of intervention are needed in these programs, and alcohol use is one such variable that if reduced may produce beneficial outcomes. In fact, there is a growing body of research demonstrating that reducing alcohol use results in reduced violence among substance use treatment seeking samples (Stuart et al., 2009), and it is possible that similar results may be evidenced with male college students.

Dating violence prevention programs could draw from the existing literature on alcohol use interventions among college students. For instance, brief motivational interventions for alcohol use have demonstrated effectiveness in reducing alcohol use and alcohol-related problems among male college students (Borsari & Carey, 2005; Terlecki, Larimer, & Copeland, 2010). These programs could easily be modified to include information about the risk of dating violence after alcohol has been consumed and provide personalized feedback on students' risk for violence. Another approach to reducing alcohol-related dating violence may be through increasing mindfulness. As discussed extensively elsewhere (Giancola, Josephs, Parrott, & Duke, 2010), it has been proposed that alcohol facilitates aggression through an excessive focus of attention on negative, aggressive cues, limiting one's ability to focus on non-aggressive cues. It has been suggested that mindfulness training may provide individuals the skills necessary to shift their attention from provocative, aggressive cues, to non-aggressive cues when intoxicated (Giancola, Josephs, DeWall, & Gunn, 2009). That is, mindfulness skills may increase self-awareness and empathy and also decrease rumination on negative affective states (Giancola et al., 2009). While this is an empirical question that remains unanswered, mindfulness-based interventions have shown to be beneficial across a range of clinical problems (see Baer, 2003 for review), and it is possible that similar effects may be found with alcohol use and dating violence. Mindfulness-based interventions largely focus on experiential exercises rooted in formal and informal meditation practices (Baer, 2003), and these approaches could be modified for dating violence prevention programs and related specifically to their relevance to relationship enhancement and self-regulation.

Limitations

The current study has a number of limitations that should be considered when interpreting its findings. First, the cross-sectional design of the current study precludes the determination of causality among variables. While the vast majority of studies on alcohol use and dating violence have been cross-sectional (Shorey, Stuart, et al., 2011), there is a need for

longitudinal research on the relation between different indicators of alcohol use (e.g., frequency of use, binge drinking) and different forms of dating violence perpetration. The use of a convenience, primarily non-Hispanic Caucasian sample of college students, who were primarily young in age, limits the generalizability of findings to more diverse samples. The use of self-report measures for all study variables also represents a limitation of the current study, as self-report bias and social desirability are often problems with dating violence assessment (Shorey et al., 2008). Future research should consider conducting structured interviews to assess alcohol use among college students, or calendar-based methodologies (i.e., the Timeline Followback Interview) to assess both alcohol use and dating violence. When self-report measures are utilized, future researchers could consider using more comprehensive measures of psychological and sexual aggression, as the CTS2 assesses only a small range of these types of aggression.

In summary, the current study replicated and extended previous research by examining the relation between alcohol use and dating violence perpetration. Results demonstrated that scores on the AUDIT, and perception of intoxication frequency, were related to all types, and severity levels, of aggression perpetration (psychological, physical, and sexual). Moreover, hazardous drinkers reported more frequent aggression perpetration than non-hazardous drinkers. In all, these findings add to a growing body of research on the relation between alcohol use and dating violence, and suggest that dating violence prevention programming should target alcohol use in their programs.

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Table 1

Bivariate Correlations, Means, and Standard Deviations among Study Variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Psychological Perp.	---	.99***	.51***	.44***	.39***	.33***	.45***	.47***	.16*	.29***	.26***	.26***
2. Minor Psychological Perp.		---	.43***	.39***	.35***	.27***	.43***	.45***	.12	.28***	.26***	.25**
3. Severe Psychological Perp.			---	.64***	.52***	.69***	.48***	.44***	.46***	.28***	.13	.24**
4. Physical Perp.				---	.93***	.71***	.43***	.35***	.51***	.25**	.11	.19**
5. Minor Physical Perp.					---	.50***	.36***	.28***	.47***	.19**	.11	.19**
6. Severe Physical Perp.						---	.45***	.34***	.68***	.28***	.07	.15*
7. Sexual Perp.							---	.96***	.46***	.35***	.29***	.31***
8. Minor Sexual Perp.								---	.23**	.32***	.30***	.28***
9. Severe Sexual Perp.									---	.26***	.05	.18*
10. AUDIT										---	.77***	.83***
11. Number of Drinks											---	.82***
12. Frequency of Intoxication												---
<i>M</i>												
<i>SD</i>												

Note: Perp. = Perpetration; AUDIT = Alcohol Use Disorders Identification Test; Number of Drinks = Largest number of drinks on one occasion.

* $p < .05$,

** $p < .01$,

*** $p < .001$

Table 2

Differences between Hazardous Drinkers and Non-Hazardous Drinkers on Frequency of Aggression Perpetration

	Non-Hazardous Drinkers <i>M (SD)</i>	Hazardous Drinkers <i>M (SD)</i>	Effect Size <i>d</i>	<i>F, p</i>
Psychological Perp.	4.39 (10.99)	10.44 (21.24)	.35	15.01, .001
Minor Psychological Perp.	4.23 (10.65)	9.04 (17.52)	.33	9.40, .003
Severe Psychological Perp.	.16 (.55)	1.48 (6.65)	.27	6.52, .01
Physical Perp.	.46 (2.58)	3.52 (16.16)	.26	6.58, .01
Minor Physical Perp.	.44 (2.55)	2.01 (8.13)	.26	4.60, .03
Severe Physical Perp.	.01 (.13)	1.47 (8.92)	.23	6.52, .01
Sexual Perp.	.38 (1.44)	2.07 (7.43)	.31	9.64, .002
Minor Sexual Perp.	.38 (1.44)	1.33 (3.23)	.37	7.51, .01
Severe Sexual Perp.	.00 (.00)	.73 (5.17)	.19	3.69, .056

Note: Perp. = Perpetration.