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Alcohol Use, Alcohol-Related Outcome Expectancies, and Partner Aggression among Males Court-Mandated to Batterer Intervention Programs: A Brief Report

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Abstract

Additional work is needed to determine how and/or why the relationship between alcohol use and increased risk for partner aggression exists. Researchers have begun to examine whether alcohol-related outcome expectancies (i.e., beliefs about the cognitive and behavioral effects of alcohol) are associated with partner aggression irrespective of alcohol use. We examined the relationship between alcohol use, alcohol expectancies, and partner aggression among 360 males arrested for a domestic violence offense and court-mandated to treatment. Results indicate that certain alcohol expectancies do play a role in the relationship between alcohol use and some forms of partner aggression.

Keywords

expectancies; partner aggression; alcohol use

Partner aggression (PA), a disturbingly common occurrence among individuals in romantic relationships, is associated with numerous devastating consequences for those involved and for society in general (Coker et al., 2002). Researchers have consistently found a link between alcohol use and increased risk for PA (Stuart et al., 2009; Foran & O'Leary, 2008), with many concluding that this relationship is likely causal in nature (e.g., Klostermann & Fals-Stewart, 2006). Numerous studies have shown that alcohol use not only increases one's risk for PA (Foran & O'Leary, 2008; Stuart et al., 2009) but also precedes initiation and increases the risk of aggressive behavior (Stuart et al., 2013; Temple, Weston, Stuart, & Marshall, 2008). However, alcohol use does not affect each individual in the same manner. For instance, although drinkers are at a greater risk for becoming involved in PA, not all

hazardous drinkers report these experiences. Further illuminating the specific nature of this relationship, which would necessarily include an examination of both risk and protective factors, is essential toward providing a fuller picture of this important area of social concern. Additionally, it may allow for the development of more effective, individually tailored programs, which have as their ultimate goal the prevention of future involvement in PA.

Alcohol-related outcome expectancies, which are theoretically linked to both the motivation literature as well as social learning theory, are beliefs about the cognitive, behavioral, and physiological effects of alcohol on the individual (Jones, Corbin, & Fromme, 2001). Alcohol expectancies (AE) have been examined in the context of aggression and violence and shown to be associated with aggressive behaviors toward others even in the absence of actual alcohol consumption (Friedman, McCarthy, Bartholow, & Hicks, 2007). Researchers examining AE in the context of PA have found mixed results, with some concluding that AE play a moderating role in the link between alcohol and PA (Borders, Barnwell, & Earleywine, 2007), but others failing to find such a link (Chermack & Taylor, 1995). Further examination of the relationship between alcohol use, AE, and PA would have numerous implications for determining the most individually useful points of intervention (e.g., challenging beliefs about alcohol's effects, reducing consumption, etc.). This is a particularly important examination to be made among males court-mandated to treatment, given that batterer intervention programs (BIPs) have been found to be largely ineffective (Babcock, Green, & Robie, 2004). In her recent review, Langenderfer (2013) emphasized that individuals court-mandated to BIPs may be at particular risk of recidivism if problems related to their alcohol use remain unaddressed. This is consistent with conclusions of other investigators of PA and alcohol use (e.g., Stuart, 2005; Stuart, Temple, & Moore, 2007). It may be even more important to address alcohol use among batterers, given that approximately two-thirds of men in BIPs have alcohol problems (Stuart, Moore, Ramsey, & Kahler, 2003; Stuart et al., 2006). Indeed, the results of a recent randomized controlled trial, in which individuals received either standard batterer intervention (i.e., BIP) alone or standard BIP plus a brief motivational alcohol intervention, suggest such adjunctive treatment may improve some PA and alcohol outcomes for 6 months, although no group differences emerged at 12-month follow-up. Unfortunately, no published research has examined alcohol use, AE, and PA among males court-mandated to BIPs.

The goal of the current study was to conduct such an examination using a sample of males court-mandated to BIPs after having been arrested for a domestic violence offense. Due to the exploratory nature of these analyses and conflicting research on AEs and PA, no specific hypotheses were made.

Methods

Participants

Participants were 360 males arrested for domestic violence and court-mandated to BIPs in Rhode Island. Twenty men (20/380, 5.3%) refused participation in the study. The mean age of participants was 33.13 years ($SD = 10.03$). The majority were Caucasian (68.3%), followed by African American (13.2%), Hispanic (9.4%), Native American or Alaskan Native (1.9%), Asian or Pacific Islander (1.9%), and "Other" (4.7%). Two participants did

not report their ethnicity. Participants reported an average of 11.97 ($SD = 2.25$) years of education and an average income of \$34,054 ($SD = \$22,654$). At the time of data collection, most reported that they were currently living with, but not married to, an intimate partner (31.7%), followed by married (26.9%), dating (18.9%), separated (6.1%), and divorced (3.9%). Some participants were no longer in a current romantic relationship (11.9%), and one participant did not report his current relationship status. Participants in this study reported having attended an average of 9.61 ($SD = 7.12$) BIP sessions at the time of the study; this was not significantly correlated with any of the variables of interest.

Procedure

Questionnaire packets were distributed and completed during men's regularly scheduled BIPs. Participation was voluntary, no compensation was provided, and none of the information collected was shared with the intervention facilitators or anyone within the criminal justice system. After this was explained and informed consent was obtained from participants, they were provided with a questionnaire packet and completed all measures of interest. Numbered questionnaires and signed consent forms were collected separately to ensure participants' responses could not be traced back to identifiable information. A description of the procedures for the current study has also been published elsewhere (Stuart et al., 2006; Stuart et al., 2009).

Measures

Demographics Questionnaire—Participants provided information about their age, ethnicity, income, years of education, and current relationship status.

Partner Aggression—The Revised Conflict Tactics Scale (CTS2), a 78-item self-report measure, was used to assess for PA (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). The psychological and physical aggression perpetration and victimization subscales of the CTS2 were examined in this study. Each subscale item can range from 0 to 25 and subscales are scored by summing the frequency of each of the behaviors endorsed in the year prior to entering the BIP (Straus, Hamby, & Warren, 2003). Thus, higher scores indicate more frequent aggression. The CTS2 is the most widely used measure of PA and has consistently demonstrated adequate reliability (Straus et al., 1996; Vega & O'Leary, 2007). In the current study, internal consistency for the perpetration of psychological aggression was .76 (8 items) and for physical aggression was .77 (12 items). Internal consistency for psychological aggression victimization was .77 (8 items) and for physical aggression was .85 (12 items). Natural log transformations of scores on the CTS2 subscales were utilized in analyses to account for positive skew.

Drinking Behavior—The Alcohol Use Disorders Identification Test (AUDIT), a 10-item self-report screening instrument, was used to assess for drinking behavior in the year prior to entering the BIP (Saunders, Aasland, Babor, De La Fuente, & Grant, 1993). This measure inquires about participants' frequency of drinking, typical amount consumed per drinking occasion, and problems associated with drinking (e.g., injuries obtained as a result of drinking, the development of tolerance, etc.); thus, it is a screening device for alcohol problems. Scores on the AUDIT can range from 0 to 40, with higher scores indicating a

greater likelihood of alcohol use and/or problems. A score of eight or higher is indicative of hazardous drinking behavior (Saunders, et al., 1993). Internal consistency for the AUDIT in the current study was .87.

Alcohol-Related Outcome Expectancies—The Effects of Drinking Alcohol Scale (EDAS), a 20-item self-report measure, was used to assess for AE (Leigh, 1989). This measure inquires about the degree to which respondents believe listed effects would occur if they were to be “under the influence” of alcohol and contains five subscales: Cognitive, Nastiness, Depression, Disinhibition, and Gregariousness. The Depression subscale was not used in the current study due to unacceptably low internal consistency ($\alpha = .24$). Estimates of internal consistency for the remaining four subscales ranged from low ($\alpha = .60$) to acceptable ($\alpha = .91$). Items from the Cognitive subscale ($\alpha = .60$; 5 items) assess one’s belief that drinking would make one feel sleepy, sick, dizzy, unable to think straight, and feel generally bad. The Nastiness subscale ($\alpha = .91$; 5 items) assesses one’s belief that drinking would make one become aggressive, get into arguments, become mean, act vulgar, and get into fights. The Disinhibition subscale ($\alpha = .76$; 4 items) assesses one’s belief that drinking would make one do things one would not do otherwise, act silly, become loud, boisterous, or noisy, and lose self-control. Finally, the Gregariousness subscale ($\alpha = .61$; 3 items) assesses one’s belief that drinking would make one become more romantic, friendlier, and sexually aggressive.

Results

Descriptive Statistics

Means, standard deviations, and correlations among study variables were conducted with SPSS 18.0 and are presented in Table 1. Associations between scores on the AUDIT and scores on the CTS2 among this sample of men have been presented elsewhere (Brasfield, et al., 2011; Stuart, et al., 2006). Thus, for the purposes of this study, we focused on describing results as they relate specifically to AE. All variables were positively correlated, with the exception of Cognitive AE, which was only positively associated with physical aggression perpetration. Hazardous drinkers (57.2% of the sample) reported stronger Nastiness, $t(346) = -5.09, p < 0.01$, Disinhibition, $t(346) = -3.85, p < 0.01$, and Gregariousness AE, $t(346) = -4.65, p < 0.01$, than did nonhazardous drinkers. Although hazardous drinkers tended to report weaker Cognitive AE than did nonhazardous drinkers, this was not a significant difference, $t(346) = 1.86, p = 0.06$.

Analysis of Main Effects

Structural Equation Modeling was used to test for main effects.¹ In each model, the AUDIT was included as an independent variable simultaneously with one of four subscales of the EDAS and one of four dependent variables (i.e., psychological or physical aggression perpetration or victimization); thus, a total of 16 models were run in the current analyses. To

¹Moderation analyses were also conducted to determine whether AEs interacted with alcohol use and aggression to increase/decrease the strength of the association between alcohol use and aggression, as researchers have proposed that AEs may moderate this relationship (Borders, et al., 2007). None of these interactions were significant and are therefore not presented in the current paper. These results are available from the first author upon request.

account for the frequency of analyses conducted, a Bonferonni correction was utilized with a p -value set to .003. AMOS version 17.0 was used for these analyses and full information maximum likelihood, which uses all data to estimate parameters and does not exclude observations with missing data, was utilized (Kline, 2005). This method has been found to be a less biased and more efficient means by which to deal with missing data than are pairwise or listwise deletion (Arbuckle, 1996). To avoid issues related to multicollinearity, all independent variables were mean centered prior to analyses (Aiken & West, 1991). All models were fully saturated and therefore provided perfect fits to the data.

Main effects for alcohol use and/or problems controlling for AE, and for AE controlling for alcohol use and/or problems, are presented in Table 2. There were main effects for alcohol use and/or problems on psychological and physical aggression perpetration and victimization when controlling for Cognitive, Nastiness, Disinhibition, and Gregariousness AE. When controlling for alcohol use and/or problems, there were main effects for: Cognitive AE on physical aggression perpetration; Nastiness AE on psychological and physical aggression perpetration and victimization; Disinhibition AE on psychological and physical aggression perpetration and victimization; and Gregariousness AE on physical aggression perpetration.

Discussion

The purpose of this study was to examine the relationship between alcohol use, AE, and PA among males court-mandated to BIPs. Results indicate that alcohol use and/or problems are associated with PA when controlling for Cognitive, Nastiness, Disinhibition, and Gregariousness AE. Further, and perhaps most interestingly, all four categories of AE were associated with at least one form of PA when controlling for alcohol use and/or problems. These results suggest that AE may play a role in the occurrence of PA in addition to the role played by alcohol use itself. Further research is needed to determine why psychological aggression was related to Nastiness and Disinhibition AE, but not to Cognitive or Gregariousness AE.

A number of limitations should be noted. First, though the EDAS is unique in that it allows for the examination of a variety of AE, its brevity (i.e., 3 to 5 items per subscale) limits conclusions that can be made. Further, it does not take into consideration participants' views of the desirability of what they believe to be the effects of alcohol. Longer, more complex measures of AE, which take into consideration participants' views of the desirability of the effects of alcohol, should be included in future work to further examine the effects of this complex phenomenon. Additionally, although the AUDIT and CTS2 are both widely used measures of alcohol use and/or problems and PA, their self-report nature is a limitation. More comprehensive assessments, such as structured diagnostic interviews, should be utilized when possible in future research. Further, to address an additional weakness of the AUDIT, future work should include measures in which the frequency of alcohol use is separated from its associated problems. In addition, the use of a cross-sectional design limits our ability to state that these results are due to causal factors among these variables. For example, it is possible that participants' reports of AE are based on accurate reflections of how alcohol has affected their behavior in the past. Longitudinal examinations would allow

for the differentiation of AE as predictors of future behavior versus reflections of past behavior. Finally, because we collected cross-sectional data from just one member of the dyad for the current study, we are precluded from inferring about the relationship between dyadic drinking and participants' actions under alcohol use. This is an area worthy of future examination.

Despite these limitations, the importance and distinctiveness of the current study are exhibited by both a focus on the effects of AE on psychological and physical PA, as well as its use of a unique sample of males court-referred to BIPs. Indeed, the use of a sample of individuals arrested for a domestic violence offense is both a strength and potential weakness of the current study, as it is a restricted range of the population. Future work should address the limitations described above, as well as to explore additional variables (e.g., personality, familial history, trait hostility, etc.) that may contribute to the relative importance of AE in the prediction of PA. For example, extensions of Stuart et al.'s (2013) study of alcohol treatment as an adjunct to standard BIPs might examine whether further exploration of AE is particularly helpful in treatment by focusing on the relationship between an individuals' specific AE and their PA. Replication and extension of this work is warranted, as this represents a potential area for future intervention efforts.

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Table 1

Means, Standard Deviations, and Correlations.

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Alcohol Use	---								
2. Psychological Perpetration	0.21*	---							
3. Psychological Victimization	0.23*	0.70*	---						
4. Physical Perpetration	0.32*	0.56*	0.53*	---					
5. Physical Victimization	0.23*	0.49*	0.66*	0.74*	---				
6. Cognitive AE	-0.02	0.08	0.01	0.16*	0.10	---			
7. Nastiness AE	0.39*	0.34*	0.23*	0.39*	0.25*	0.47*	---		
8. Disinhibition AE	0.29*	0.33*	0.29*	0.29*	0.19*	0.46*	0.78*	---	
9. Gregariousness AE	0.19*	0.14*	0.18*	0.21*	0.17*	0.17*	0.37*	0.43*	---
<u>Hazardous Drinkers:</u>	M 13.39	34.85	37.35	11.44	17.44	2.51	2.89	3.12	3.54
	SD 7.34	31.56	31.45	18.84	28.51	.74	1.09	.93	.78
<u>Nonhazardous Drinkers:</u>	M 2.06	23.73	27.60	4.53	12.09	2.67	2.27	2.71	3.10
	SD 2.07	27.55	33.75	11.37	22.23	.82	1.14	1.06	1.03
<u>Total Sample (Hazardous and Nonhazardous Drinkers):</u>	M 8.33	29.93	33.04	8.36	15.08	2.57	2.62	2.95	3.35
	SD 7.96	30.32	32.80	16.30	28.47	0.77	1.15	1.01	0.92

Note.

Alcohol Use assessed with the Alcohol Use Disorders Identification Test (AUDIT); Psychological and Physical Perpetration and Victimization assessed with the Revised Conflict Tactics Scales (CTS2); Cognitive, Nastiness, Disinhibition, and Gregariousness AE assessed with the Effects of Drinking Alcohol Scale (EDAS); Means and standard deviations calculated with raw scores on all measures; Correlations calculated utilizing raw scores on the AUDIT and EDAS and natural log transformations of scores of the CTS2.

* $p < .01$;

Table 2
Main Effects for Alcohol Use Controlling for Expectancies, and for Expectancies Controlling for Alcohol Use

Independent Variables	Psychological				Physical			
	Perpetration		Victimization		Perpetration		Victimization	
	β	B	SE	β	β	B	SE	β
1. Alcohol use and/or problems	.23	.04	.01*	.29	.24	.04	.01*	.28
Cognitive AE	.05	.10	.10	.01	.16	.27	.09	.10
2. Alcohol use and/or problems	.18	.03	.01*	.26	.18	.03	.01*	.25
Nastiness AE	.28	.33	.06*	.19	.35	.39	.06*	.21
3. Alcohol use and/or problems	.19	.03	.01*	.26	.21	.03	.01*	.26
Disinhibition AE	.33	.43	.07*	.26	.26	.34	.07*	.16
4. Alcohol use and/or problems	.21	.03	.01*	.27	.21	.03	.02*	.26
Gregariousness AE	.10	.14	.08	.13	.17	.24	.07	.12

Note. 1 = alcohol use controlling for Cognitive AE, and Cognitive AE controlling for alcohol use; 2 = alcohol use controlling for Nastiness AE, and Nastiness AE controlling for alcohol use; 3 = alcohol use controlling for Disinhibition AE, and Disinhibition AE controlling for alcohol use; 4 = alcohol use controlling for Gregariousness AE, and Gregariousness AE controlling for alcohol use;

β = standardized beta weight; B = unstandardized beta weight; SE = standard error; Alcohol use and/or problems assessed with the Alcohol Use Disorders Identification Test (AUDIT); Psychological and Physical Perpetration and Victimization assessed with the Revised Conflict Tactics Scales (CTS2); Cognitive, Nastiness, Disinhibition, and Gregariousness AE assessed with the Effects of Drinking Alcohol Scale (EDAS).

* $p < .003$,

† $p < .05$;