

Alcohol and Violence Related Cognitive Risk Factors Associated With the Perpetration of Intimate Partner Violence

Craig A. Field,^{1,3} Raul Caetano,¹ and Scott Nelson²

The primary aim of this study is to determine the association between alcohol, violence related cognitive risk factors, and impulsivity with the perpetration of partner violence among current drinkers. A probability sample ($n = 1468$) of White, Black, and Hispanic couples 18 years of age or older in the United States household population was interviewed in 1995 with a response rate of 85%. The risk factors of interest included the alcohol and violence related cognitions of approval of marital aggression, alcohol as an excuse for misbehavior, and aggressive expectations following alcohol consumption as well as impulsivity. In all, 15% (216/1468) of the respondents reported perpetration of domestic violence. In addition, 24% (7/29) of those who approved of marital violence, 11% (126/1163) of those who reported alcohol use as an excuse for misbehavior, 10% (128/1257) of those who reported aggressive expectations following alcohol consumption, and 14% (99/716) of those who reported impulsivity also reported perpetration of domestic violence. Bivariate analysis indicated that all of the cognitive risk factors were significantly more common in those who reported perpetration of intimate partner violence (IPV) ($p < 0.05$). However, multivariate analysis controlling for ethnicity, education, income, age, gender, and impulsivity indicated that those who reported strong or very strong expectations of aggressive behavior following alcohol consumption were 3.2 (95% CI = 1.3–7.9) times more likely to perpetrate IPV. Although all of the alcohol and violence related cognitive risk factors were associated with the perpetration of domestic violence, expectations of aggressive behavior following alcohol consumption appeared to be the strongest predictor of the perpetration of IPV among current drinkers. Therefore, alcohol expectancy may be an important factor to assess when attempting to identify and treat perpetrators of domestic violence who are also current drinkers.

KEY WORDS: intimate partner violence; alcohol; cognition; attitudes; impulsivity; ethnicity; national survey.

INTRODUCTION

Intimate partner violence (IPV) is a serious public health problem in the United States (Bachman, 2000; Schafer *et al.*, 1997a; Strauss & Gelles, 1990). Survey research over the last two decades reveals that a range of violent behaviors are prevalent among United States couples. The National Family Violence Survey of 1975, 1985, and

1992 estimated that nearly one in six couples experienced one or more episodes of IPV (Strauss & Kantor, 1994). In addition, in 1992 over 90 couples per 1000 experienced minor assaults (i.e., pushing, grabbing, shoving, throwing something at spouse) each year (Strauss & Kantor, 1994). Rates from a couples survey conducted as a component of the 1995 National Alcohol Survey, providing the data being analyzed for this study, indicate that more than one in five couples in the United States experienced at least one episode of IPV over the last 12 months (Schafer *et al.*, 1998).

Research has consistently reported a strong association between IPV and the use of alcohol (Bushman, 1993; Collins & Messerschmidt, 1993; Hotaling & Sugarman,

¹University of Texas School of Public Health, Houston, Texas.

²UT Southwestern Medical Center at Dallas, Dallas, Texas.

³To whom correspondence should be addressed at 5323 Harry Hines Blvd. Room V8.112, Dallas, Texas 75390-9128; e-mail: Craig.Field@UTSouthwestern.edu.

1986; Kantor *et al.*, 1993; Leonard, 1993; Pernanen, 1976, 1991). In a broad overview of studies of alcohol use and IPV, Roizen (1993) estimates that men are drinking at the time of the event in about 45% of all cases and women are drinking in about 20% of such events. Previous analyses of the data set analyzed herein showed that between 27 and 41% of the men and 4 and 24% of the women, depending on ethnicity, were drinking at the time of the violent incident (Caetano *et al.*, in press). Prior studies also indicate that individuals who report alcohol problems are much more likely than those who do not report these problems to perpetrate IPV. These associations have been consistently reported both in general population and clinical samples (Cunradi *et al.*, 1999; Miller *et al.*, 1989; Murphy & O'Farrell, 1994; O'Farrell & Choquette, 1991; Walker, 1991).

Presence of alcohol during partner violence does not necessarily mean that alcohol is the cause of the violence being reported. It is important to consider that the violence could have occurred without individuals being actively under the acute influence of alcohol. That is, they may use alcohol over a long period of time or experience significant problems with alcohol but they have not necessarily nor are they necessarily intoxicated at the time of the perpetration of IPV. In summary, it is possible that occurrence of violence is not associated with any direct effect of alcohol use per se. As outlined previously (Caetano *et al.*, in press), the following may also serve as explanations of this association: a) individuals expect alcohol to disinhibit them and then act out this expectation by being violent, b) individuals consciously use alcohol as an excuse for their violent behavior, c) alcohol appears to be associated with violence because both heavy drinking and violence have common predictors such as impulsivity or other personality characteristics. Several additional risk factors may also be associated with IPV.

Personality characteristics such as impulsivity have also been associated with both alcohol use and violence (Hamberger & Hastings, 1991). Impulsivity is a risk factor for IPV, in that impulsivity is often characterized as an inability to regulate certain behaviors, such as aggression. Again, previous research of the national survey data analyzed herein identified significant associations between history of childhood physical abuse, impulsivity, drinking problems, and IPV (Scott *et al.*, 1999). In addition to impulsivity, there is also a well-established relationship between alcohol expectancies and drinking behavior. Given the strong relationship between alcohol use and IPV, research on IPV has employed questions about attitudes toward violence and alcohol use, but other important individual characteristics such as alcohol expectancies, impulsivity, attitudes toward partner violence, may be impor-

tant components of a more comprehensive understanding of the perpetration of IPV. The primary aim of this study is to determine the association between cognitive risk factors including approval of marital aggression, alcohol as an excuse for misbehavior, and aggressive expectations following alcohol consumption and the perpetration of partner violence while controlling for impulsivity among a group of current drinkers.

METHODS

Sampling and Data Collection

Methods were described in detail elsewhere (Schafer *et al.*, 1997b, 1998). Briefly, subjects were selected through a multistage area household probability sampling procedure from individuals 18 years of age or older living in households in the 48 contiguous states. The overall survey response rate was 85%. Since the primary independent variables of interest were alcohol related attitudes (i.e., alcohol as an excuse and aggressive expectations) the analysis includes 965 main respondents who were current drinkers. That is, 372 lifelong abstainers and 278 ex-drinkers were not included in the current study. In addition, as one aim of the study was to examine the association of alcohol and violence related attitudes and the perpetration of IPV among White, Black, and Hispanic main respondents, data analyzed in this paper are on the basis of interviews with main respondents who self-identified as belonging to those racial/ethnic groups. Thus, the final sample used in analysis was composed of 845 main respondents from the 1995 couples survey. Data were collected during 1 hour, face-to-face interviews conducted in respondents' homes with standardized questionnaires.

Measurements

Perpetration of Intimate Partner Violence

Main respondents were asked about the 11 physically violent behaviors that they may have perpetrated against their partners during the past year. These items were adopted from the Conflict Tactics Scale, Form R (Straus, 1990) and include: threw something; pushed, grabbed, or shoved; slapped; kicked, bit, or hit; hit or tried to hit with something; beat up; choked; burned or scalded; forced sex; threatened with a knife or gun; and used a knife or gun. Instead, the items were scored dichotomously. Violence was considered to have occurred if the main respondent reported perpetrating one of the violent behaviors in the past year.

Approval of Marital Aggression

Main respondents were asked to rate their approval on a 4-point Likert scale to the following behaviors: 1) a husband is acting in a verbally aggressive or verbally abusive way towards his wife; 2) a wife is acting in a verbally aggressive or verbally abusive way towards her husband; 3) a husband is behaving in a physically violent way to his wife; and 4) a wife is behaving in a physically violent way to her husband. Those responding “always approve” or “sometimes approve” to any of the behaviors were counted as approving. Those responding “always disapprove” or “sometimes disapprove” to all of the behaviors were counted as disapproving (reference group). Because of high correlation between those approving verbal and physical abuse, these categories were combined into a single “approval of marital aggression” category.

Alcohol as Excuse

Main respondents were asked to rate their agreement on a 4-point Likert scale to the following items pertaining to alcohol as an excuse for misbehavior: 1) If I had done something really bad, I would feel better about it if I had been drinking at the time; 2) People are more likely to forgive me when I do something embarrassing if I have been drinking; 3) I should not be blamed for things I do when I have been drinking; and 4) There are times when I deliberately had a drink to have an excuse for doing something risky. Those responding “strongly agree” or “agree” to any one of the items were counted as agreeing. Those responding “strongly disagree” or “disagree” to any one of the items were counted as disagreeing (reference group).

Impulsivity

Main respondents were asked to rate their agreement on a 4-point Likert scale to the following items pertaining to impulsivity: 1) I often act on the spur of the moment without stopping to think; 2) I get a real kick out of doing things that are little dangerous; 3) I like to test myself every now and then by doing something a little chancy; 4) You might say I act impulsively; and 5) Many of my actions seem to be too hasty. Those responding “quite a lot” or “some” to any one of the items were counted as agreeing and those responding “a little” or “not at all” were counted as disagreeing (reference group).

Aggressive Expectations from Alcohol Use

Main respondents were asked to rate the likelihood that they would become aggressive if they were to drink enough alcohol to feel the effects on a 4-point Likert scale. Those who responded “very strong chance” or “strong chance” were counted as having a strong chance of becoming aggressive, those who responded “some chance (50/50)” were counted as having some chance of becoming aggressive, and those who responded “not much chance” or “no chance at all” were counted as having not much chance of becoming aggressive (reference group).

Sociodemographic

Respondents who identified themselves as black or white of Hispanic origin (Latino, Mexican, Central, or South American, or any other Hispanic origin) were classified as Hispanic. Respondents who selected the category “black, not of Hispanic origin” were classified as Black. Respondents who selected “white, not of Hispanic origin” were classified as White. Age of respondents was measured continuously in years. Each respondent was classified as male or female. Respondents’ income was grouped into 5 categories: <\$10,000; \$10,001–\$20,000; \$20,001–\$30,000; \$30,001–\$40,000; and >\$40,000. Education was treated as a continuous variable.

Statistical Analysis

Analyses were conducted with the Software for Survey Data Analysis (SUDAAN) (Research Triangle Institute, 1996) to correct for the underestimation of standard errors due to the multistage sampling design. Analyses were also conducted on data weighted to adjust for the probability of selection into the sample and nonresponse rates. For univariate analysis of outcome variables and risk factors frequencies and percentages for each are reported. For bivariate analyses, chi-square tests were performed to determine if there were racial/ethnic differences in the incidence of approval of marital aggression, alcohol as an excuse for misbehavior, impulsivity, and aggressive expectations following alcohol use among White, Black, and Hispanic main respondents. For this particular analysis, poststratification weights were calculated to adjust the sample to known population distributions by ethnicity. Chi-square tests were also computed to determine gender differences in incidence of approval of marital aggression, alcohol as excuse, impulsivity, and aggressive expectations from alcohol use. In addition, chi-square

tests were also computed to determine differences in the incidence of approval of marital aggression, alcohol as excuse, impulsivity, and aggressive expectations from alcohol use among main respondents who did and did not perpetrate IPV. For multivariate analyses, logistic regression was computed, with perpetration of IPV as the dependent variable and incidence of approval of marital aggression, alcohol as excuse, impulsivity, aggressive expectations from alcohol use, as independent variables controlling for ethnicity, gender, age, education, and income. To correct for clustering effects resulting from the multicluster sample design, which tends to decrease the magnitude of the standard errors, all analyses were performed with the Software for Survey Data Analysis (SUDAAN) statistical program.

RESULTS

Analysis of incidence of risk factors among Black, White, and Hispanic main respondents revealed significant differences in approval of marital aggression and aggressive expectations from alcohol. In brief, approval of marital aggression and aggressive expectations from alcohol are less common in Whites than in Blacks or Hispanics (Table I). Certain gender differences in prevalence of alcohol and violence related attitudes were identified as well. In brief, approval of marital aggression, alcohol as an excuse for misbehavior, and impulsivity were more common in males (Table II).

Univariate analysis of prevalence of approval of marital aggression, alcohol as an excuse for misbehavior, impulsivity, and aggressive expectations from alcohol consumption among perpetrators of IPV in main respondents indicated that all of the cognitive and personality risk factors evaluated herein including permissive attitudes toward partner violence, alcohol as excuse for misbehavior, impulsivity, and expectations of aggressive behavior;

Table I. Prevalence of Risk Factors in Blacks, Whites, and Hispanics

	Black	White	Hispanic
Attitudes toward partner violence**	19 (5.4)	8 (1.4)	24 (4.9)
Alcohol as an excuse	79 (22.6)	107 (18.8)	79 (16.5)
Impulsivity	180 (51.7)	284 (48.8)	222 (45.9)
Aggressive alcohol expectation**			
Very strong chance/strong chance	35 (17.5)	29 (7.4)	24 (10.3)
Some chance (50/50)	32 (16.0)	53 (13.5)	30 (12.8)

** *p* < 0.05.

Table II. Prevalence of Risk Factors in Males and Females

	Males	Females
Attitudes toward partner violence**	31 (3.5)	7 (1.0)
Alcohol as an excuse**	189 (21.6)	118 (16.8)
Impulsivity**	453 (50.9)	325 (45.1)
Aggressive alcohol expectation		
Very strong chance/strong chance	45 (7.1)	42 (9.9)
Some chance (50/50)	84 (13.2)	61 (14.4)

** *p* < 0.05.

were significantly more common in perpetrators of IPV (Table III). However, multivariate analysis of the association between the cognitive and personality risk factors and perpetration of IPV suggest that those who responded that they had a very strong chance or a strong chance of aggressive behavior following alcohol consumption were 3.2 (95% CI = 1.3–7.9) times more likely to perpetrate IPV after controlling for age, gender, education, income, and ethnicity.

DISCUSSION

The major finding of this study is that, although all of the cognitive and personality risk factors evaluated herein tend to be more common in perpetrators of IPV, expectations of aggressive behavior following alcohol consumption appear to be the most influential predictor for the perpetration of IPV in couples than permissive attitudes toward IPV, alcohol as an excuse for misbehavior, and risk taking. In addition, certain risk factors were more common in certain ethnic groups and may be gender specific (i.e., more common in males). These findings may have important implications for screening and intervention of currently drinking cohabitating individuals who are at risk of perpetrating partner violence.

Table III. Prevalence of Risk Factors in Perpetrators of Intimate Partner Violence

	No perpetration freq. (%)	Perpetration freq. (%)
Attitudes toward partner violence**	29 (2.0)	9 (4.6)
Alcohol as an excuse**	259 (18.7)	48 (24.9)
Impulsivity**	664 (46.9)	113 (58.2)
Aggressive alcohol expectation**		
Very strong chance/strong chance	61 (6.6)	26 (18.8)
Some chance (50/50)	123 (13.3)	22 (15.9)

** *p* < 0.05.

When interpreting results of this study, certain limitations of the data should be taken into account. First, data analyzed in this study include only current drinkers and, therefore, excludes lifetime abstainers and individuals who have not drunk alcohol in the past year (ex-drinkers). In addition, data analyzed herein do not include information from spouse but rather relies solely on the reports of main respondents. This may underestimate the outcome variable of interest, perpetration of IPV. Finally, the most powerful risk factor as indicated in multivariate analysis was expectation of aggressive behavior following alcohol intake which was assessed with a single item. Nevertheless, the study has several strengths that compensate for these inherent weaknesses. The sample is unique and represents a random selection of main respondents to the 1995 National Alcohol Survey who were married or cohabitating. Thus, it may provide unique insights into risk factors associated with the perpetration of IPV.

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