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### Men's Avoidance Coping and Female Partner's Drinking Behavior: A High-Risk Context for Partner Violence?

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#### Abstract

The current study explored whether men's avoidance coping in response to the drinking behavior of their female partner with an alcohol use disorder (AUD) would be associated with higher levels of men's perpetration of intimate partner violence (IPV). Women with an AUD (n = 109) and their male partners in a U.S. urban area were assessed on men's perpetration of minor and severe violence using the Conflict Tactics Scale, men's avoidance coping using the Spouse Behavior Questionnaire, and men's and women's drinking behavior using the Time Line Follow Back Interview. Using multiple regression analysis, results showed that men's use of avoidance coping significantly predicted male IPV perpetration over and above the women's perpetration of violence toward him, while women's alcohol use did not significantly predict male-to-female IPV perpetration. Implications for teaching emotion-regulation strategies to male partners of women with an AUD to cope with partner drinking are discussed.

#### Keywords

Intimate partner violence; Avoidance coping; Female alcoholics; Alcohol use

Empirical and meta-analytic data from community samples suggest roughly equal rates of intimate partner violence (IPV) perpetration by men and women (Drapkin et al., 2005; Moore et al., 2008), but data also consistently show that negative consequences of IPV victimization disproportionately affect lives of women relative to men [Thompson et al., 2003; World Health Organization (WHO), 2009]. For example, women are much more likely than men to receive medical attention resulting from IPV victimization, and recent trends indicate that women account for nearly 75% of the IPV-related deaths that occur each year (Centers for Disease Control and Prevention, 2006). Among other co-morbid healthrisk behaviors, alcohol use is a particularly salient factor that has been shown to significantly increase risk for female victimization (Mericle & Havassy, 2008), where emerging statistics show that women with an alcohol use disorder (AUD) are much more likely than nonproblem drinking women to report past-year violence victimization (Lipsky et al., 2006). Given these trends, there is a need to understand better the interaction among contextual (i.e., alcohol use) and partner-specific (i.e., emotion coping) factors that portend risk for female IPV victimization, and in particular, uncover how these factors are associated with male-to-female partner violence in the lives of women with an AUD.

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A limited number of studies has looked at factors associated with male IPV perpetration in samples of women with an AUD. Findings from these studies suggest that partner-relevant factors are more robust predictors of female violence victimization than amount or frequency of the women's alcohol use. For example, using a large community sample of women with and without an AUD, Testa, Livingston, and Leonard (2003) reported that binge drinking by the woman did not predict whether she was victimized by her male partner one year later, nor did experiencing partner violence at baseline significantly increase odds of women's episodic drinking at the one-year follow-up. Chase et al. (2003) found similar results in their sample of female alcoholics seeking couples-based alcoholism treatment. There were no differences between violent and non-violent couples with respect to women's drinking quantity, frequency, or alcohol problem severity reported in the three months prior to the baseline assessment, but the male partner's alcohol use did differentiate violent from nonviolent couples. Specifically men in violent relationships reported greater quantity and frequency of alcohol use than men in non-violent relationships. Moreover, while men who were in partner violent relationships reported significantly higher levels of psychological distress than men who were not, women reported equal levels of distress across violent and nonviolent relationships.

In an analysis of male and female partner violence reported at baseline in our sample of treatment-seeking women with AUDs, Drapkin et al. (2005) found that 61% of the couples in the sample reported some form of minor or severe violence in the past year; and that women's drinking intensity (i.e., mean drinks per drinking day) was significantly related to her use of verbal aggression, psychological coercion, and minor and severe violence toward her male partner, while the only male correlate of the woman's drinking was his use of psychological coercion. Findings also showed that the more often male partners drank, the less likely they were to use verbal aggression and psychological coercion toward female partners; but there appeared to be no relationship between the amount the male partner drank and his use of physical aggression. These findings are consistent with those reported from prior studies that did not show associations between women's drinking and female violence victimization (Chase et al., 2003; Testa et al., 2003). It may be that male partner-specific characteristics play a more central role in the perpetration of male-to-female IPV among women with an AUD then the woman's own drinking behavior. Thus, we sought to explore this research question empirically, by examining whether association between men's IPV perpetration and women's drinking in our clinical treatment-seeking sample would be moderated by partner-relevant factors, specifically men's ways of coping with emotional distress.

Emerging evidence indicates that restrictive emotional coping and avoidance of distressing emotional states among men are robustly linked with men's use of aggressive conflict tactics toward another (Cohn & Zeichner, 2006; Moore & Stuart, 2005; Moore et al., 2008; O'Neil, 1986, 2008). One reason to explain this link is that men are socialized to avoid and restrict feeling and expressing "vulnerable" and "soft" emotions, such as sadness or anxiety, in order to appear powerful and dominant, rather than being viewed as "weak" (O'Neil, 1986). As a result, emotional distress may get expressed in ways that are congruent with masculine role norms and that restore a sense of dominance, such as through aggressive tactics (Cohn et al., 2009; Moore & Stuart, 2005). A line of research shows that rigid and maladaptive over-conformity to masculine gender role norms has been associated with constructs of emotional avoidance and restriction, as well as aspects of emotional dysregulation (Jackupcak & Roemer, 2005), including a lack of acceptance and clarity of negative emotional experiences (Cohn, Seibert, Hildebrandt, & Zeichner, 2010).

While studies of risk factors of men's IPV perpetration have focused on level of adherence to masculine gender role norms and the extent to which men internalize normative aspects of

masculine gender role (referred as "masculinity" or "masculine ideology"; Moore & Stuart, 2005), research has become increasingly interested in examining the association between how men *feel* and *think* about their masculinity (referred to as masculine gender role stress or conflict; O'Neil, 1986, 2008) to men's IPV and violence. Understanding the role of the cognitive and emotional components of men's gender role adherence has become progressively relevant to the IPV literature because studies show that the psychological aspects of adhering to masculine role norms are strongly linked to men's use of aggressive conflict tactics and IPV perpetration in clinical and non-clinical samples (Moore & Stuart, 2004, 2005; Moore, Stuart, McMulty, Addis, & Cordova, 2008). More importantly, however, are findings from review studies and empirical research indicating that men's perceived stress about their gender role conformity, and the restrictive behavioral expression that results from over-adherence to socialized masculine role norms, better predict aggression and violence than masculine ideology alone (Cohn & Zeichner, 2006; Moore & Stuart, 2005). Thus, directed by theory of masculine gender role socialization (O'Neil, 1986), when men are experience emotional distress as a result of either perceived or real challenges to their masculine identity, some men may use aggressive and violence as a means to obtain a sense of control and power, to ultimately restore his sense of masculinity (Eisler, 1995;O'Neil, 2008).

There is growing support that men's experiences of emotional distress, particularly in the form of negative affect, moderates the association between men's perceived adherence to masculine gender role norms and their use of physical aggression toward another, and that emotional distress among men is also linked to hostile attitudes and feelings of anger. First, several studies suggest that the association between aspects of masculinity and aggression is strongest when men experience negative emotions (Cohn et al., 2008; Moore & Stuart, 2004.). Second, data show that use of avoidant and restrictive emotional coping among men is more strongly associated with men's reports of psychological distress than any other facet of masculine identity (e.g., need for power and dominance and fear of appearing feminine) and also predicts men's feelings of hostility, lessened ability to control anger, use of physical aggression toward another in laboratory tasks (Cohn et al., 2010; Jakupcak et al., 2005), and reports of physical partner violence perpetration in male batterers (Moore, Stuart, McNulty, Addis, & Cordova, 2008). Finally, in a recent investigation of the unique aspects of the social networks of women with AUDs using the sample under investigation in the current study, it was found that avoidance coping in response to the women's drinking was the most frequently cited coping strategy reported by the male intimate partners (Green et al., 2007). Extrapolating from these studies, findings strongly suggest that the link between avoidance coping and violence perpetration among men may increase risk for male-initated IPV toward women with an AUD.

While attention has focused on the influence of alcohol on men's aggressive behavior, little research has been reported on the effects of how men's coping with the drinking behavior of their female partners would increases risk toward male-to-female relationship violence. Thus, the current study sought to understand the role of men's avoidance coping in response to their female partners' drinking behavior as a risk factor for male IPV perpetration in the lives of women with alcohol abuse or dependence, prior to receiving treatment. Our study tested the hypothesis that the association between women's alcohol use and experiences of IPV victimization would be moderated by the degree to which male partners used avoidance coping as a way to deal with the women's problematic drinking. Specifically, we hypothesized that the association between female partner's alcohol use and male IPV perpetration would be altered by men's degree of avoidance coping, such that the relationship between women's quantity and frequency of alcohol would be more strongly associated with male IPV perpetration at higher rather than at lower levels of men's avoidance coping.

#### Method

#### **Participants**

The current study is a secondary analysis of findings reported by McCrady et al. (2009) of a randomized controlled trial comparing 20 outpatient sessions of individual or couple alcohol behavioral therapy for women with an AUD. Data collected at the baseline assessment were used for the present study. Women were included in the study if they met criteria for DSM-IV Alcohol Abuse or Dependence, consumed alcohol in the 60 days prior to the baseline assessment, were married or in a committed relationship for the past year, and had a partner who was willing to attend treatment. Women were excluded if either partner showed severe cognitive impairment, psychosis, or drug dependence with physiological dependence in the six months prior to the baseline interview. Couples also were excluded on the basis of severe domestic violence if either partner reported fear of violence or other retribution from participation in the treatment, or if any episode of domestic violence in the past year had resulted in need for medical attention. Three potential participants were excluded from the study based on these IPV criteria. See McCrady et al. (2009) for more detailed information on subject recruitment.

The present study consisted of 109 adult females with a DSM-IV diagnosis of Alcohol Abuse or Dependence and their male partners who completed the baseline assessment. On average, participants were middle-aged (M = 45, SD = 9.17 for women; M = 48, SD = 10.47 for men) and fairly well educated (years of education M = 14.43, SD = 2.69 for women; M = 15.22, SD = 3.02 for men). The sample was mostly Caucasian (95% of women and 96% of men), and reported a median household income of \$79,000 per year. Nearly half (48%) of the women and the majority of men (84%) were employed full or part time. Ninety-nine percent of the women met criteria for a diagnosis of Alcohol Dependence and 30% of the men met criteria for a lifetime or current diagnosis of an AUD.

#### Measures

Structured Clinical Interview for DSM-IV (SCID; First et al., 1996)—The SCID alcohol and drug use sections, administered at baseline, were used to assess lifetime and current alcohol abuse or dependence for the women and their male partners.

**Timeline Follow Back Interview (TLFB; Sobell & Sobell, 1996)**—The TLFB was administered at baseline to assess quantity and frequency of men's and women's alcohol use in the 90 days prior to the last drinking day before the baseline interview. The indices of Percent Drinking Days (PDD) and Mean Drinks per Drinking Day (MDDD) were used in the present study. Test–retest reliability for the TLFB is high (Sobell & Sobell, 1996).

**Modified Conflict Tactics Scale-Revised (MCTS; Pan et al., 1994)**—The MCTS-2 is a 24-item self-report questionnaire that was administered at baseline to assess reports of past year relationship violence. Six items were added that were conceptualized as psychologically coercive and one item was remove that had an ambiguous factor loading ("hit or tied to hit spouse with something"). Ratings are assessed on a 6-point Likert scale ranging from 0 (never) to 5 (more than 20 times) and two sets of ratings were derived for each respondent: one for the self's own behavior and one for the behavior of the partner. The MCTS provides four domains of partner violence: verbal aggression, psychological coercion, minor violence, and severe violence. Item examples include "Have you slapped your partner?" "Have you pushed, grabbed, or shoved your partner?" and "Have you beaten up your partner?" Based on recommendations of Straus and Gelles (1990), the report that was included in the data analysis described below was determined by the member of the couple who reported more violence overall (i.e., "worse case" report). Based on this, data

from 79 female and 30 male respondents were used. Subscales were calculated by adding together the Likert score of each item from that scale, so that each partner received one score for each subscale. Reliability coefficients were  $\alpha = .64$  for men's minor violence and  $\alpha = .26$  for men's severe violence. Low reliability for the severe violence subscale for men's IPV was likely due to the limited range of severely violent acts reportedly initiated by men in that no man engaged in more than 1 act of severe aggression.

Spouse Behavior Questionnaire (SBQ; Kahler et al., 2003)—The SBQ used in the current study was adapted from the original version (James & Goldman, 1971) by including items designed to assess positive coping strategies and combining items that were similar or redundant. See Kahler et al., 2003 for more details on modification. It is a 55-item selfreport scale that was administered to male partners at baseline to assess their use of four types of coping strategies in response to their female partner's drinking behavior in the past year: Confrontation/Control, Avoidance of Confrontation, Detachment, and Positive Consequences of Sobriety. Partners are asked to rate the frequency of engaging in these behaviors using a 6-point Likert scale ranging from "0" (never) to "5" (once a week or more). Item examples include "Pretending to everyone that all is well" and "Avoiding her or staying out of her way when she is drinking." Subscales scores are calculated by adding together the items from each subscale. The Avoidance subscale, consisting of 8-items, was used in the current study because we felt it was most closely captured the construct of "avoidance coping" that we sought to examine. This subscale demonstrated excellent reliability at  $\alpha = .82$ . All missing item values were replaced with the subject's mean value for the subscale.

#### Procedure

Following initial determination of eligibility through a telephone screening interview, couples were interview together to determine study eligibility, assess any immediate clinical needs, and to obtain informed consent. Baseline interviews to collect demographic and drinking data were conducted conjointly. Partners were interviewed separately for the assessment of domestic violence using the MCTS and administration of the SCID modules. All procedures were approved by the Rutgers University Institutional Review Board.

#### Results

#### Frequency and Number of Acts of Male-IPV in the Past 12 Months

Overall, MCTS data indicated that 51% of men had engaged in minor violence in the past year, with 15.6% of men reporting at least 1 act of minor violence, 12.7% reporting 2, 3 or 4 acts, and 1% reporting 5 or more acts of minor IPV in the past year. For severe violence, 12% of the men reportedly engaged in one severely violent act toward their female partner in the past year; no one engaged in more than one act of severe violence.

### Associations among Male IPV Perpetration, Men's Avoidance Coping, and Men's and Women's Alcohol Use

Pearson-product moment correlations among men's avoidance coping, male IPV perpetration, and women's and men's drinking showed that minor and severe violence were significantly and highly correlated (r = .80, p < .01). Men's avoidance coping was significantly and positively correlated with men's minor and severe violence (r = .42, p < .01 and r = .27, p < .01, respectively), as well as female MDDD (r = .31 p < .01). Female PDD and MDDD were not significantly related to men's minor or severe violence, nor was female PDD associated with men's use of avoidance coping. Male PDD was significantly and positively correlated with male MDDD (r = .32, p < .01) and negatively correlated with his use of avoidance coping. For more detailed information on frequency,

means, and correlations of women's IPV with other variables in the sample, please refer to Drapkin et al. (2005).

As a result of the high inter-correlation between men's minor and severe violence, we created a composite score of male IPV perpetration as the dependent variable for the analysis of moderation (discussed below) by standardizing and summing the two subscales. Descriptive analysis revealed that the composite male IPV score was positively skewed and had elevated kurtosis. We therefore transformed this variable using a Log +1 transformation, which yielded an approximately normal distribution (skewness = .51 and kurtosis = -1.07). Table I displays the raw score means, standard deviations, and inter-correlations among male IPV, men's avoidance coping, and men's and women's quantity and frequency of alcohol use.

#### Men's Avoidance Coping × Women's Drinking

The principal focus of the present study was to determine whether men's avoidance coping would moderate the relationship between women's alcohol use (both quantity and frequency) and male IPV perpetration. Moreover, given positive and significant correlations between men's avoidance coping and women's alcohol use (i.e., MDDD), moderation analyses would allow for the investigation of the multiplicative influence of both variables on men's partner violent behavior.

Given that men's avoidance coping is continuous in nature, linear regression analyses were indicated to test for moderation (Aiken & West, 1991). Separate equations were calculated such that the composite score of male IPV perpetration was regressed separately on women's alcohol's use [Percent Drinking Days (PDD) and Mean Drinks per Drinking Day (MDDD)], using avoidance coping as the moderator variable in each regression model. The recommendations of Aiken and West (1991) and Jaccard and Turrisi (2003) were followed to test for moderation effects using multiple regression equations. In this approach, it is necessary to compute a product term between the independent variable of interest and the moderator variable. This requires that scores be standardized (i.e., z-transformed) to reduce multi-collinearity between interaction terms and their lower-order terms and to account for scale invariance. Standardizing scores also allows for regression coefficients to be interpreted within the same metric (Aiken & West, 1991; Jaccard & Turrisi, 2003). Scores for men's avoidance coping and women's alcohol use were converted to z-scores and interaction terms were calculated by obtaining the cross-products of the first order variable scores. Unstandardized regression coefficients were interpreted because the interpretation of standardized coefficients would yield incorrect effects (See Aiken & West, 1991 for further explanation). Thus, parameter estimates for regression equations are reported as unstandardized b's. The significance value of the interaction term was examined to determine whether moderation significantly improved the equation. For equations with no significant moderation, regression coefficients reflecting main effects are reported below. For equations with significant interaction terms, regression coefficients for simple effects (one standard deviation above and one standard deviation below the mean of avoidance coping were tested to determine whether they were significantly different from zero.

Two separate regression equations were computed using men's avoidance coping as the moderator, women's drinking (quantity or frequency) as the independent variable, and male violence as the focal dependent variable. The first model examined interaction of women's PDD and men's avoidance coping. The second model examined interaction of women's MDDD and men's avoidance coping. Correlation coefficients revealed that potential covariates of women's age, women's education, household income, years in relationship, and men's alcohol use (quantity and frequency) were not significantly associated with the dependent variable and were therefore not included in the final regression models.

We also controlled for the women's use of violence toward the male partner in our tests of moderation, given the significant correlations between female IPV perpetration and male IPV perpetration previously reported in this sample (Drapkin et al., 2005). The women's violence perpetration variable was created by computing a composite score from the women's minor and severe violence subscales of the MCTS.

Using hierarchical regression analyses, women's violence perpetration was entered in the first step of the model, the main effect of women's alcohol use (either PDD or MDDD) was entered into the second step, Avoidance Coping in the third step, and the Avoidance Coping  $\times$  Women's Drinking term (either PDD or MDDD) was entered in the fourth and final step. Tables II and III display the results of the hierarchical regression analyses for men's avoidance coping and women's alcohol use as predictors of male IPV perpetration.

For the first model, analyses revealed a significant main effect of men's avoidance coping (b = .31, p < .01), after controlling for the effects of women's violence perpetration (b = .53, p < .01), F(3, 103) = 28.42. Neither women's PDD nor the Avoidance × PDD interaction significantly predicted men's violence.

For the second model, analyses revealed a significant main effect of men's avoidance coping (b = .34, p < .01), after controlling for the effects of women's violence perpetration (b = .56, p < .01), F(2, 103) = 28.34. Neither women's MDDD nor the Avoidance × MDDD interaction significantly predicted men's violence.

#### **Exploratory Analyses**

We conducted several exploratory analyses to examine the relationship between men's AUD diagnosis and alcohol use behavior with his perpetration of IPV because of prior research suggesting a robust and unique link between men's alcohol use and male-to-female IPV (Moore, Stuart, Meehan, Rhatigan, Hellmuth, & Keen, 2008; Stith et al., 2004). We operationalized men's AUD diagnosis in two different ways: one variable examined lifetime or current DSM-IV diagnosis of either abuse or dependence (coded dichotomously as "yes" or "no"), while a second variable examined lifetime or current DSM-IV Alcohol Dependence (coded dichotomously as "yes" or "no"). We also examined men's percent days abstinent and percent heavy drinking days in the past three months as correlates of male-to-female IPV. None of these variables were significantly associated with male perpetration of IPV. This may be because of the small percentage of men in the sample who endorsed problematic drinking or received an AUD diagnosis (N =26).

#### Discussion

The purpose of the current study was to test the hypothesis that men's use of avoidance coping in response to the drinking behavior of their female alcoholic partner would moderate the association between women's alcohol use and male-initiated partner violence. Findings from hierarchical regression analyses did not support the study hypotheses. No significant avoidance coping × women's drinking interaction was found, but analyses revealed a significant main effect of men's avoidance coping in predicting men's use of IPV, even after controlling for the effects of women's violence perpetration. Specifically, a greater tendency toward avoidance coping among male partners of female alcoholics predicted higher risk for male IPV perpetration. More importantly, association between men's avoidance coping and use of male partner violence remained significant over and above the influence of female-to-male IPV. This suggests that men's ways of coping with their partner's drinking behavior, and related negative consequences, can significantly impact the occurrence of male IPV perpetration toward his female partner and that partner-specific factors may play a dominant role in violence victimization among women with an

AUD. Lastly, results indicated that women's quantity and frequency of drinking did not significantly increase her risk of experiencing female violence victimization in the past year. These findings are consistent with previous community and population-based research showing that the quantity and frequency of drinks consumed by the woman does not necessarily increase her risk for experiencing violence victimization (Chase et al., 2003; Testa et al., 2003; WHO, 2009).

Results of this study suggest that a woman with an AUD is at greater risk for being physically assaulted by her male partner if he avoids confrontation as a coping mechanism in response to her drinking. Our findings also indicate the risk of female violence victimization is significantly associated with the woman's perpetration of violence toward her male partner. One reason to explain this finding is that aggressive acts reported by men in the current sample may have occurred as a result of self-defense in response to the women's initiation of aggression or provocation toward him. Our findings also suggest men's avoidance coping actually undermines his efforts to handle his partner's drinking in a constructive and non-provocative manner, as evidenced by the positive association between men's avoidance coping and his use of IPV. Over time, avoidance of her behavior and his own emotional distress may turn into frustration toward the female partner, and eventually lead to perpetration of a violent act. The positive association between men's avoidance of confrontation and use of IPV may also have occurred because some men may have been violent in the past year, but had learned to avoid their female partners when they drank in order to reduce this violence. Indeed, we could not test the causal sequence of the onset of men's avoidance coping and their use of partner violent behavior with our current data set, although this is an important question to explore in future studies.

That men's avoidance coping, rather than female or male partner's drinking severity, emerged as the significant predictor of male-to-female partner violence also suggests that men's use of aggression may be more strongly influenced by internal factors (i.e., emotional dysregulation), rather than by external and situational factors (i.e., the women's drinking), which is consistent with theories linking aspects of masculine gender role conformity to men's perpetration of violence (Cohn et al., 2010; Moore & Stuart, 2005). As such, men's susceptibility to avoid or suppress strong emotional experiences, particularly those that arise in situations when the drinking behavior of their female partner is out of control, appears to play a prominent role in his use of maladaptive partner-coping behavior and increases his propensity to engage in aggression. The non-significant interaction between avoidance coping and female drinking also suggests that those who engage in avoidance coping are likely to use IPV toward their female partners regardless of how often or how much she drinks. Notably, we did not find an association between the male partners' own diagnosis of alcohol abuse or dependence and their use of violence toward their female partner. This may be because there was a relatively low prevalence of problematic drinking reported by the men in the sample. Given what we know about the robust association between alcohol use by men and perpetration of aggression toward another (Testa et al., 2003), additional research is warranted to investigate the impact of men's current or lifetime diagnosis of an AUD on risk for partner victimization among treatment-seeking samples of women with an AUD. Overall, an important implication from these findings for future prevention and intervention research is that women with an AUD and their male partners appear to get "stuck" in a vicious cycle wherein male partners "act out" in response to their own emotional distress; increasing conflict and violence may then create greater instability in the relationship, triggering relapse or continued alcohol use by the woman. This would be an important causal chain of behaviors to examine in future research.

There were several limitations of the current study. First, while regression analyses provide powerful statistical tests for determining associations among variables, analyses of cross-

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sectional data do not warrant conclusions of causality (Jaccard & Turrisi, 2003). We cannot exclude the possibility that greater male IPV leads to greater use of avoidance coping among men, or that both variables are related to a third variable that was not measured in the current study. Moreover, it is important to note that masculinity and masculine gender role stress, both of which have been associated with increased aggressive behavior in men (Cohn & Zeichner, 2006; Moore & Stuart, 2004; 2005), were not assessed directly and the association of these constructs with avoidant coping in the current are not empirically demonstrated. Second, we did not assess whether men's IPV occurred independent of provocation or in response to the woman's aggression toward him. Thus, we cannot conclude from our findings that men's IPV was unprovoked and arose independent of the women's initiation of an aggressive act toward her partner. However, that the association between men's use of avoidance coping and male-to-female IPV remained significant even after controlling for the effects of women's use of aggression suggests that avoidant coping by the male partner uniquely and independently influences his use of violent behavior. Future studies should explore the causal relationship between male-to-female IPV and female-tomale IPV among alcohol dependent women, and should more carefully examine behavioral sequences that culminate in IPV. Third, given that the current sample included only couples who were willing to engage in conjoint treatment, findings may not be generalizable to relationships of alcohol dependent females who do not want their partners involved with their treatment, or whose partners are less engaged. However, prevalence of IPV in the present sample was relatively high (Drapkin et al., 2005) and approximated estimates of the prevalence of female victimization found in previous community treatment-seeking samples with a similar demographic composition (Schneider et al., 2009). Another limitation of the study is that couples were excluded from the study if they reported severe domestic violence that required medical attention in the past year or fear of harm by a partner by participating in the treatment, which may explain the low reliability coefficient for the severe violence subscale on the CTS and the non-normal distribution for the male violence. However, concerns about the influence of skewness of the dependent variable (i.e., IPV) on the interpretation of our findings should be reduced in that we improved the distribution characteristics of the variable by applying a logarithmic transformation. Future studies should determine whether findings from the current study could be replicated in a clinical sample with more severe reports of IPV.

That our hypothesized interaction and a significant main effect association between women's alcohol use (i.e, X) and men's IPV (i.e., Y) was not supported merits further consideration. Most typically, moderation analyses are conducted to better explain an existing X-Y relation, even if that relation is just conceptual in nature. Oftentimes, the actual moderation analysis (with X, Moderator, and X × Moderator as predictors) results in the main effect of X (i.e., the X-Y relation) being non-significant. In the present study, the rationale for conducting a moderation analysis was based on the conceptual and theoretical assertion that male aggression would be positively related to their female partner's alcohol use. Thus, even though the simple correlation was not significant in the present data set, theoretical support for that relation can be a sufficient justification to conduct a moderation analysis (Aiken & West, 1991; Frazier et al., 2004; Kraemer et al., 2001, 2002).

Overall, findings from the current study provide continued evidence that social network characteristics, such as partner-relevant factors, operate as salient risk factors for violence victimization in the lives of women with an AUD. Importantly, social-interpersonal factors, as found in this study, appear to account for a significant amount of the variance in male partner violence perpetration, over and above the quantity and frequency alcohol consumed by either partner in the dyad. Moreover, data indicate that teaching emotion-regulation strategies to men who use avoidance coping in response to their partner's drinking behavior, as well as communication strategies to discuss different ways of coping with problematic

drinking behavior may be useful treatment components. Additionally, male partners of women with an AUD would likely benefit from increased monitoring of their own emotional and behavioral reactions to their partner's alcohol consumption as one potential strategy for decreasing partner violent behavior, feelings of hostility, or anger. Further research is needed to examine the influence of men's coping behaviors on abstinence outcomes among alcohol dependent women during and after alcohol treatment, as well as to conduct a costbenefit analysis of teaching emotion-regulation modules to male partners who use avoidant coping strategies in response to their female partner's drinking.

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#### **Responses to reviewers**

#### **Reviewer #1**

This is a well written and well designed study that adds something new to the literature on IPV. The authors present their data and analyses clearly, the data analysis is solid and well conceived and the interpretation of the results is quite reasonable.

No responses are needed.

#### **Reviewer #2**

1. First, the basic hypothesis is not clear. The introduction indicates that the association between women's drinking and men's IPV is "conditioned upon" men's avoidance coping. It is not clear why the authors chose to use this phrasing rather than the more conventional terminology of a moderator effect.

We have changed the wording of this from "condition upon" to "moderated by" to reduce confusion and be more concise.

2. That aside, as phrased at the end of the introduction, no "conditioned" (i.e., moderator or interaction) effect is clearly predicted, as the wording is consistent with independent additive effects of avoidance coping and women's drinking and the hypothesized form of an interaction effect is not described. Specifically, the paper states that "higher levels of avoidance coping among men and greater frequency and quantity of female partner drinking would be associated with higher levels of male IPV perpetration" (p. 6). This is not a conditioned or moderator effect, as it does not explain how avoidance coping is thought to alter the association between women's drinking and men's IPV.

We have changed the wording of our hypothesis to indicate more clearly how we believe avoidance coping is thought to alter the association women's drinking behavior and men's IPV.

**3.** Second, the construct of masculinity, or traditional male socialization, is conflated with the notions of emotional avoidance and/or avoidance coping. Although emotional restriction is considered a facet of traditional masculinity (as the authors note), masculinity is not synonymous with the emerging clinical conception of emotional avoidance, which has a central place in recent universal theories of cognitive behavior therapy for emotional disorders (e.g., Barlow's work). The extent to which masculinity is related to, or the same as emotional avoidance remains very unclear, particularly given that a normative aspect of socialization is being used as a conceptual framework for a pathological aspect of emotional and behavioral functioning.

Yes, we agree with the reviewer that masculinity itself is not synonymous with emotional avoidance. The theoretical construct that we discuss in the paper has more to do with masculine gender role stress/conflict. That is, rather than adherence to masculine gender role norms, which is typically understood as masculinity or ideology, gender role stress (MGRS) or conflict describes how men "feel" and "think" about their masculinity. Higher levels of MGRS are expressed as a rigid, maladaptive over-conformity to masculine gender role norms and has been associated with constructs of emotional avoidance and restriction, poor emotional dysregulation (Cohn, Seibert, Hildebrandt, & Zeichner, 2010; Jackupcak & Roemer, 2005), and reports of physical violence in male batterers (Moore, Stuart, McNulty, Addis, & Cordova, 2008). We have made note of this in the manuscript on pages 5-6 and attempted to clarify the

distinction between masculinity and masculine gender role stress throughout the manuscript, where needed.

**4.** It is also important to note that masculinity is not assessed directly (no data are presented on this construct), and its association with avoidant coping in the current sample is not empirically demonstrated.

We have added this as a limitation in the Discussion section on page 18 of the manuscript.

5. ...insofar as gender role ideology is a component of masculinity, it has not been consistently associated with IPV (according to comprehensive reviews of this literature). In sum, the conceptualization of masculinity as the core issue here is neither consistent with prior studies, conceptually coherent vis a vis emotional avoidance, nor is it directly tested as a correlate of IPV in the investigation.

We have clarified and addressed this issue on pages 5 and 6 of the manuscript with a new paragraph that discusses the rationale and empirical studies noting associations among masculine gender role conformity, violence, partner violence, and emotion coping. We also note, per the comment above, that we have addressed this as a limitation in the Discussion section on page 18.

6. The overall model appears to provide a very isolated analysis of one potential risk factor with little consideration of other theoretically important and/or empirically-demonstrated risk factors for IPV in this population. Even forms of coping with the partner's drinking other than avoidance (which were apparently assessed on the Spouse Behavior Questionnaire) are not considered here. Also absent is any consideration of whether other known or potential risk factors may account for associations between avoidance coping and IPV. Men's own use and abuse of substances is a fairly obvious one to consider here, as well as longstanding personality characteristics (e.g., antisocial traits) and/or psychopathology (e.g., general distress and/or symptoms of mood and anxiety disorders). Exploratory analyses are provided to address men's diagnosis of alcohol use disorder, but not within a clearly articulated conceptualization of multiple risk factors for IPV perpetration.

We agree that, as with any outcomes or behaviors being examined in psychological research, there are always multiple risk factors that may lead to the endpoint. In this paper, we chose to take a systematic and hypothesis-driven approach to examining partner-relevant risk factors for IPV victimization among women with an AUD. Statistical model building was therefore guided by the desire to be parsimonious, hypothesis-driven rather than exploratory (i.e., including a large number of risk factors in the model), and therefore very specific about the targeted mechanisms to be tested. We focused on the Avoidance subscale of the Spouse Behavior Questionnaire as we felt that this subscale most accurately assessed the construct that we were seeking to test: men's avoidance coping. We have added a rationale for this on page 10 of the manuscript, in the paragraph wherein we describe the measure.

In a similar vein, we chose to examine one other theoretically important and empirically-demonstrated risk factor for IPV: men's alcohol use (Moore et al., 2008). There is research to indicate (noted on pages 3 and 15 of the manuscript), that alcohol is one of the most highly co-occurring and robust correlates with men's IPV perpetration. We hope that this will provide a rationale for our examination of this particular variable, as opposed to other risk factors. Findings from this study represent a "first pass" at understanding the role of men's

emotion coping in relation to our outcomes of interest and believe that it will be important to follow-up in future studies to examine the relevant risk factors noted by the reviewer above (anxiety, mood disorders, general distress) in other papers.

- 7. A few minor issues in the manuscript also bear mention:
  - **a.** The citation for Straus and Gelles (1990) is missing from the reference section.

This has been fixed in the reference section.

**b.** The description of the Spouse Behavior Questionnaire indicates that it is adapted from the original, but no information is provided on the specific adaptations made.

This has been attended to in the manuscript.

**c.** Similarly, with respect to the modified Conflict Tactics Scale, no information is provided on how that measure was modified from the original CTS.

This has been attended to in the manuscript.

# Table I

Means, Standard Deviations, and Correlations for Minor and Severe Male IPV Perpetration, Men's Avoidance Coping, and Female and Male Alcohol Use (raw scores) <sup>1</sup>

			Cor	<b>Correlation Coefficient</b>	Coeffici	ent			
	W	<u>SD</u> 1.	Ι.	2.	3.	4.	5.	6.	7.
1. Men's Minor IPV	1.60	2.60	I	.80 <sup>**</sup>	.42**	09	.15	11	02
2. Men's Severe IPV	0.40	1.40		I	.27**	10	.05	06	07
3. Avoidance Coping	12.77	9.46			ł	06	.31**	21*	14
4. Women's PDD	65.00	2.00				ł	.04	15	02
5. Women's MDDD	8.17	4.96					ł	08	.07
6. Men's PDD	33.00	32.00						ł	.32**
7. Men's MDDD	3.57	2.77							

Note. IPV = Intimate Partner Violence; PDD = Percent Drinking Days; MDDD = Mean Drinks per Drinking Day. Descriptive statistics for IPV scores represent the number of acts committed by the man in the past year. Scores on Avoidance Coping could range from 0 to 40; higher scores indicate greater tendency to use avoidance coping.

 $_{p < .05.}^{*}$ 

p < .01,

\* \*

#### Table II

## Summary of Hierarchical Regression Analysis for Women's Percent Drinking Days (PDD) and Men's Avoidance Coping Predicting Male IPV Perpetration $(n = 109)^{a}$

	Variable	Beta	$\Delta R^2$
1	Women's IPV	.61**	.42**
2	Women's IPV	.61**	
	PDD	15	.00
3	Women's IPV	.53**	
	PDD	14	
	Avoidance	.31**	.03**
4	Women's IPV	.53**	
	PDD	14	
	Avoidance	.31**	
	Avoidance $\times$ PDD	29	.00

Note. IPV = Intimate Partner Violence; Avoidance = Men's avoidance coping.

<sup>a</sup>Data represent z-transformed scores for the independent variables and logarithmic scores for the dependent variable.

\* p < .05

\*\* p < .01

#### Table III

### Summary of Hierarchical Regression Analysis for Women's Mean Drinks per Drinking Day (MDDD) and Men's Avoidance Coping Predicting Male IPV Perpetration (n = 109)<sup>*a*</sup>

Step	Variable	Beta	$\Delta R^2$
1	Women's IPV	.61**	.42**
2	Women's IPV	.62**	
	MDDD	08	.00
3	Women's IPV	.56**	
	MDDD	15	
	Avoidance	.34**	.04**
4	Women's IPV	.56**	
	MDDD	12	
	Avoidance	.34**	
	Avoidance $\times$ MDDD	06	.00

Note. IPV = Intimate Partner Violence; Avoidance = Men's avoidance coping.

 $^{a}$ Data represent z-transformed scores for the independent variables and logarithmic scores for the dependent variable.

\* p < .05

<sup>\*\*</sup>p < .01