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The Role of Alcohol Problems in the Association Between Intimate Partner Abuse and Suicidality Among College Students

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Objective: Intimate partner abuse is a prevalent public health issue among college students and has been associated with suicidality and alcohol abuse. Evidence suggests that alcohol-related problems mediate the relationship between intimate partner abuse and suicidality, but it is limited to suicidal ideation among women. We aimed to expand the applicability of an existing mediation model by incorporating multiple indicators for intimate partner abuse and suicidality using a nationally representative sample of college students. ***Method:*** We used data from the National College Health Association Survey (N = 88,568). Key variables included involvement in intimate partner abuse (psychological, physical, and sexual), involvement in alcohol-related problems, and suicide-related behaviors (self-harm, ideation, and attempt). ***Results:*** We used structural equation modeling to test the mediation model. Results showed that alcohol-related problems partially mediated the association between abusive relationship involvement and suicidality. Furthermore, this association was equally present across men and women. ***Conclusions:*** Results demonstrate that psychological, physical, and sexual abuse involvement lead to self-harm, suicidal ideation, and suicide attempts via problematic alcohol use. The partial mediation by alcohol-related problems suggests the potential benefit of treatment focusing on both problematic alcohol use and intimate partner abuse in preventing suicidality.

Keywords: domestic violence, suicide, sexual abuse, drinking, self-harm

According to a recent representative survey of college counseling centers, students seeking treatment reported abusive relationships, suicidal thinking, and alcohol-related problems among their top concerns (Center for Collegiate Mental Health, 2016). Intimate partner abuse is also prevalent among college students (Shook, Gerrity, Jurich, & Segrist, 2000; Shorey, Stuart, & Cornelius, 2011). In dating relationships, 80% of young adults experience psychological abuse, 20% experience physical abuse, and 10% experience sexual abuse (Shorey, Cornelius, & Bell, 2008). Still, college students seem unprepared to cope with these adversities, as they tend to use maladaptive coping strategies, including problematic use of alcohol (Blanco et al., 2008; Britton, 2004). College students use alcohol heavily and habitually: 59% of full-time college students drink regularly, 39% binge (having five or more drinks on one day in past month), and 13% drink excessively (binge drinking more than 5 days in past month; Substance Abuse and Mental Health Services, 2014). Moreover, college students are at risk of suicide—it is the second leading cause of death among college-aged adults (18–24 years old), and its prevalence has increased from 12.60 deaths to 13.23 deaths per 100,000 from 2010–2014 (National Center for Injury Prevention and Control, 2013, 2015). These findings call for an investigation of relationships among intimate partner abuse, alcohol-related problems, and suicidality in college students. In the current study, our primary purpose was to examine problematic alcohol use as a mediator explaining the relationship between intimate partner abuse involvement and suicidality in a nationally representative sample of college students.

Intimate Partner Abuse, Suicidality, and Problematic Alcohol Use

Involvement in abusive intimate relationships is a salient predictor of suicidality. Across 36 studies, McLaughlin, O'Carroll, and O'Connor (2012) found that intimate abuse involvement predicted increased suicidality across cross-sectional, case-controlled, and longitudinal studies. Often, victim and perpetrator roles overlap in intimate partner abuse, with both parties (perpetrators and victims) at increased risks of experiencing suicide attempts and

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Portions of the current findings were presented at the 2015 Association for Behavioral and Cognitive Therapies Conference, Chicago, Illinois. Specifically, the partial mediation model, where alcohol-related problems mediated the relationship between intimate partner abuse and suicide-related behaviors, was presented.

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ideation (Chowdhary & Patel, 2008; Dufort, Stenbacka, & Gumpert, 2015; Lamis, Leenaars, Jahn, & Lester, 2013). The association between intimate abuse and suicidality is observed across multiple nations (Chan, Straus, Brownridge, Tiwari, & Leung, 2008; Chan, Tiwari, Leung, Ho, & Cerulli, 2007). This association also seems strong: A meta-analysis found a threefold increase in the chances of experiencing suicidality associated with intimate abuse (odds ratio = 3.55; Golding, 1999).

Perpetrators and victims of intimate partner abuse are at risk of increased alcohol misuse and suicidality. Involvement in abusive relationships is a risk factor for increased alcohol consumption and alcohol-related problems (e.g., getting injured because of drinking; Devries et al., 2014; Foran & O'Leary, 2008; Rothman, Reyes, Johnson, & LaValley, 2011; Stuart et al., 2013). Theoretically, alcohol acts as both a distal and proximal risk factor for suicidality (Hufford, 2001). As a distal risk factor, alcohol aggravates depression and negative life events over time; as a proximal risk factor, alcohol promotes impulsive behaviors leading to suicidality after an acute drinking episode (Cherpitel, Borges, & Wilcox, 2004; Dvorak, Lamis, & Malone, 2013; Giegling et al., 2009; Kaplan et al., 2014).

Problematic Alcohol Use as a Possible Pathway From Intimate Partner Abuse to Suicidality

The aforementioned studies demonstrate that intimate partner abuse involvement, alcohol-related problems, and suicidality are interrelated. Yet, directionality of these associations is difficult to determine. One potential explanation is that people facing intimate partner abuse may use alcohol to cope with negative experiences, and this increased alcohol use develops into risks of suicidality. The "self-medication" or the tension-reduction hypothesis (Cappell & Herman, 1972; Greeley & Oei, 1999; Khantzian, 1985) suggests that some people drink alcohol to alleviate negative affect (e.g., "to relax" or "when I feel down"). In the context of intimate partner abuse, individuals involved in abusive relationships may consume alcohol excessively to alleviate negative emotions arising from victimization and perpetration. This form of drinking appears maladaptive—using alcohol to cope with negative affect has been connected with more serious alcohol consumption and more severe alcohol-related problems, which then predicts suicidality (Dvorak et al., 2013; Kaplan et al., 2014; Kuntsche, Knibbe, Gmel, & Engels, 2005; Lamis & Malone, 2011; Sher, 2006).

A contrary perspective suggests that alcohol problems can cause intimate partner abuse, as supported by past evidence (Leonard, 2005; Leonard & Quigley, 2016). A meta-analysis reviewing cross-sectional and longitudinal studies on intimate abuse and alcohol suggested that the relationship between intimate partner abuse and alcohol problems may be complex: Sometimes alcohol problems precede abuse, and at other times abuse precedes alcohol problems (Devries et al., 2014). According to this perspective, alcohol problems may predict suicidality via intimate abuse, a reverse association different from our current hypothesis that intimate abuse predicts suicidality via alcohol problems. We therefore tested this reverse association as an exploratory analysis.

The literature summarized above suggests that, for many, intimate partner abuse involvement can increase problematic alcohol use and that problematic alcohol use leads to suicidality. Merging these two predictions generates a hypothesis that problematic alcohol use might partly explain the association between intimate partner abuse involvement and suicidality. Lamis, Malone, and Langhinrichsen-Rohling (2010) demonstrated this association in a cross-sectional study: Alcohol-related problems mediated the relationship between psychological abuse involvement and suicidal ideation among female college students. Yet, unanswered questions remain as to (a) whether this model is generalizable for other forms of abuse and suicidality and (b) whether this model holds for a general college student population, including men. To address these questions, the current study incorporated multiple indicators of abuse (i.e., psychological, physical, and sexual) and suicidality (i.e., self-injury, suicidal ideation, suicide attempt) in a latent variable framework using a nationally representative sample of college students. Further, we used the multigroup structural equation model in a separate analysis to examine moderation by gender and to extend the previous evidence limited to women (Lamis et al., 2010).

Current Study

The current study examined whether alcohol-related problems mediate the relationship between intimate partner abuse involvement and suicidality. We aimed to extend the mediation model suggested by Lamis and colleagues (2010) in the following aspects: We used a large, nationally representative sample of college students in a structural equations framework treating intimate partner abuse, alcohol-related problems, and suicidality as latent variables each representing a distinct construct inferred from a range of indicators (Purpose 1; see Figure 1). Consistent with the previous model, we hypothesized that increased involvement in abusive relationships would predict increased alcohol-related problems, which in turn predicts increased suicidality (Purpose 2). In addition, we tested gender as a moderator to examine the generalizability of the previously tested model to men (Purpose 3; Lamis et al., 2010).

Method

Participants

The current sample was drawn from a nationally representative survey (National College Health Assessment II [NCHA II]) conducted by American College Health Association (ACHA) from fall 2008 to spring 2009 in 158 U.S. colleges and universities. Participants were randomly selected and invited to complete the survey via email during the institution's assessment period. Further details on the ACHA–NCHA II data collection procedure were described in the executive summary (American College Health Association, 2011). The present study was approved by the institutional review board for the university, in accordance with ethical standards for human research.

The initial data set contained 113,790 participants. Our inspection of the data suggested that some responses were invalid. We excluded participants if they met one of the following criteria by indicating (a) that they used all the drugs in the survey, (b) that they were diagnosed with all the mental health conditions in the survey, (c) that they belonged to all the racial groups in the survey (including biracial and other), or (d) that they had all the disability

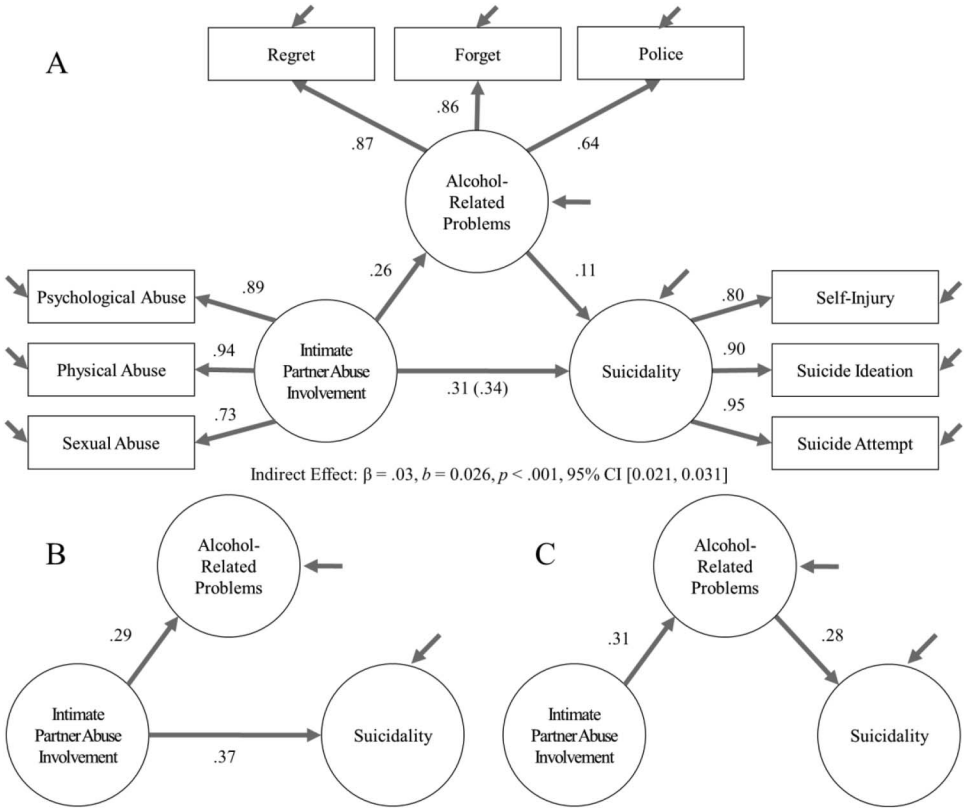

Figure 1. Hypothesized structural equation modeling (SEM) models. (A) The partial mediation model. (B) The no mediation model. (C) The full mediation model. Coefficients and factor loadings are standardized for both the observed and latent variables (completely standardized solution). All models had the same endogenous observed variables (omitted in B and C). Analysis indicated that the partial mediation model had the best fit. All analyses were controlled for age, sex, gender, race/ethnicity, relationship status, current residence, and fraternity/sorority membership, modeled to the alcohol problems mediator and the suicidality outcome. All regression coefficients and factor loadings were significant ($p < .001$). CI = confidence interval.

conditions (e.g., deaf, blind, attention-deficit hyperactivity disorder) in the survey.

The final sample included 88,568 undergraduate students (58,413 women and 30,155 men) with a mean age of 22.05 years (median = 20; *SD* = 5.73). A majority of the participants identified as White (75.2%). Other ethnicities included Black (6%), Hispanic (7%), Asian or Pacific Islander (10.3%), and American Indian, Alaskan, or Native Hawaiian (1.4%). Participants reported being single (48%), in a cohabiting relationship (15%), and in a noncohabitating relationship (37%). Most of the participants identified as heterosexual (93%); others identified as gay or lesbian (2%), bisexual (3%), and unidentified (2%).

Materials

The ACHA–NCHA II is a 66-item instrument collecting demographic and physical and mental health information on general college students for faculty, administrators, and researchers to gain a picture of student functioning (American College Health Association, 2015). The NCHA II contains survey questions administered at various points throughout the academic year by participating institutions for reporting and decision making.

ACHA developed the NCHA II survey to demonstrate the reliability and validity to generalize results to the college student population. For the original data set (fall 2008–spring 2009), the standardized Cronbach's alpha coefficients for the mental and physical health items ranged from .84–.90, respectively (American College Health Association, 2013). We also calculated Cronbach's alphas for the current sample for the recorded items using the semTools package on R (Pornprasertmanit et al., 2016; R Core Team, 2014). The observed reliabilities were acceptable: .89 for the intimate partner abuse, .82 for the alcohol-related problems, and .92 for the suicidality items (Nunnally & Bernstein, 1994).

The ACHA–NCHA II had three items about intimate partner abuse involvement that we used as indicators of the intimate partner abuse latent variable. The items referred to (a) psychological abuse (e.g., "called derogatory names, yelled at, ridiculed"; factor loading [λ] = .89; squared multiple correlations [SMC] = .79), (b) physical abuse (e.g., "kicked, slapped, punched"; λ = .94; SMC = .89), and (c) sexual abuse (e.g., "forced to have sex when you don't want it"; λ = .73; SMC = .53) experienced in an intimate (coupled or partnered) relationship within the past 12-month period. For the alcohol-related problems latent variable, we

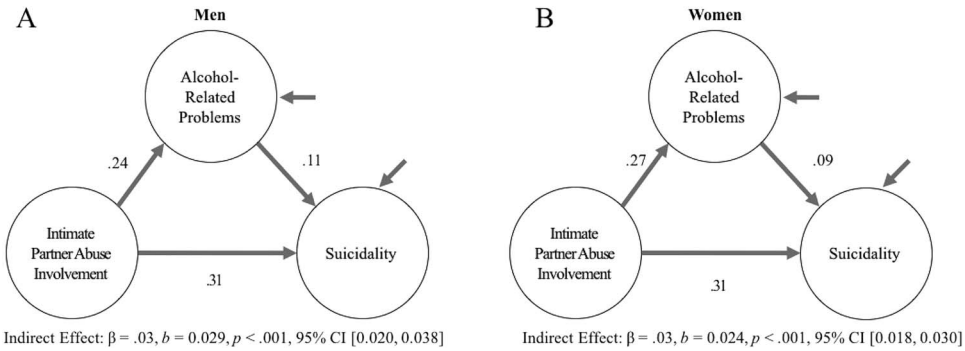

Figure 2. Multigroup structural equation modeling (SEM) models testing gender as a moderator: (A) results for men and (B) results for women. Regression coefficients are standardized for all levels. All analyses were controlled for age, sex, gender, race/ethnicity, relationship status, current residence, and fraternity/sorority membership, modeled to the alcohol problems mediator and the suicidality outcome. The overlapping confidence intervals (CIs) for the indirect effects across genders suggest that the indirect effect was not moderated by gender. All regression coefficients were significant ($p < .001$).

selected three items about experiences due to alcohol consumption within the past 12 months: (a) having done something regrettable ("did something you later regretted"; λ = .87; SMC = .75), (b) loss of memory ("forgot where you were or what you did"; λ = .86; SMC = .74), and (c) getting in trouble with police ("got in trouble with the police"; λ = .64; SMC = .41). These alcohol-related problems items mirrored the dimension measured in a previous study testing a similar model (Lamis et al., 2010). For the suicidality latent variable, we used three items referring to (a) self-injury ("intentionally cut, burned, bruised, or otherwise injured yourself"; λ = .80; SMC = .64), (b) suicidal ideation ("seriously considered suicide"; λ = .90; SMC = .81), and (c) suicidal attempt ("attempted suicide"; λ = .95; SMC = .90) within the past 12 months. All responses were dichotomized into yes (coded as 1; experienced in the past 12 months) or no (coded as 0; not experienced in the past 12 months).

Analysis Strategies

We used the lavaan package on R to perform the analyses (R Core Team, 2014; Rosseel, 2012). We used the diagonally weighted least squares (DWLS; Jöreskog, 1990) for estimating model parameters. This method was robust against Type I error in large samples involving categorical variables (Bandalos, 2014)—a particular concern given our large sample size. The full-weight matrix was used to compute robust standard errors. We controlled for gender (except multigroup models testing gender moderation), age, race or ethnicity, relationship status, current residence type, fraternity or sorority membership, and depression, consistent with previous literature (e.g., Lamis et al., 2010). We dummy coded all categorical covariates and included them as exogenous fixed variables modeled to the mediator and the outcome variable.

Figure 1 shows the three models being compared: a partial mediation model (Figure 1A), a no mediation model (Figure 1B), and a full mediation model (Figure 1C). The no mediation model assumed that intimate partner abuse and alcohol problems were conditionally independent. The partial mediation model assumed that alcohol problems partially explain the effect of intimate abuse on suicidality. The full mediation model had no direct path between intimate abuse and suicidality, suggesting that alcohol problems fully explain the relationship between abuse and suicidality. We used a chi-square difference test to examine which model fit the best. In addition, we examined the obtained fit indices against the previously suggested cutoffs (Hu & Bentler, 1999; Yu, 2002): .95 or more for comparative fit index (CFI) and Tucker-Lewis index (TLI), .06 or less for root mean square error of approximation (RMSEA), and .9 or less for weighted root mean square residual (WRMR).

After determining which model fit the best, we tested the indirect effect of intimate partner abuse involvement on suicidality by examining the confidence interval based on conventional robust standard errors (Huber, 2011). We could not use the conventional bootstrapping method for testing the indirect effect because our analyses used the DWLS estimation method with robust standard errors to accommodate categorical variables. Rather, we relied on robust standard errors to account for nonnormality of the indirect effect distribution.

Results

Preliminary Analysis

We first examined polychoric correlations among the target dichotomous variables (see Table 1). Results showed that the intimate partner abuse items, the alcohol problems items, and the suicidality items were related to each other. Then we examined whether the observed variables loaded on the hypothesized latent variables (i.e., intimate partner abuse involvement, alcohol-related problems, and suicidality). The results showed that measured items loaded on their respective latent factor relatively well. Thus, we proceeded with the structural equation modeling (SEM) analysis testing the mediation hypothesis.

Mediation Models

We tested whether alcohol-related problems mediated the relationship between intimate partner abuse and suicidality (Purpose 1). The partial mediation model showed significantly better fit than

Table 1
Polychoric Correlation Matrix

Item	1	2	3	4	5	6	7	8	9
1. Psychological	9.76%								
2. Physical	.84	2.16%							
3. Sexual	.65	.67	1.47%						
4. Regret	.23	.21	.20	27.27%					
5. Forget	.17	.19	.16	.74	23.44%				
6. Police	.17	.23	.15	.53	.52	3.10%			
7. Self-injury	.29	.30	.31	.18	.15	.13	4.98%		
8. Ideation	.32	.30	.32	.17	.14	.13	.72	5.84%	
9. Attempt	.31	.35	.36	.14	.12	.16	.77	.87	.93%

Note. Items 1 through 3 refer to intimate partner abuse involvement. Items 4 through 6 refer to alcohol-related problems. Items 7 through 9 refer to suicidality. Descriptions of items are as follows: Psychological = "having been in an emotionally abusive relationship." Physical = "having been in a physically abusive relationship." Sexual = "having been in a sexually abusive relationship." Regret = "did something you later regretted." Forget = "forgot where you were or what you did." Police = "got in trouble with the police." Self-injury = "intentionally cut, burned, bruised, or otherwise injured yourself." Suicidal ideation = "seriously considered suicide." Suicidal attempt = "attempted suicide." All correlations were statistically significant ($ps < .001$). The diagonals represent the proportion of participants answering "yes" to the respective item.

the no mediation model, $\Delta\chi^2(1) = 96.34$, $p < .001$, indicating that the hypothesized mediation was plausible. Next, we compared the partial mediation model against the full mediation model. The chi-square difference test showed that the full mediation model had a worse fit than the partial mediation model, $\Delta\chi^2(1) = 857.39$, $p < .001$. Examination of the model fit indices also indicated that the partial mediation model fit the data better than the no mediation model or the full mediation model (see Table 2). The partial mediation model explained 17% of the variance in suicidality. In combination, these results suggest that the partial mediation model fit the observed data better than the other two examined models.

The estimated standardized regression coefficients among the latent factors in the partial mediation model are presented in Figure 1A. There were significant relationships between intimate partner abuse and suicidality ($\beta = .31$, $p < .001$) and between intimate partner abuse and alcohol-related problems ($\beta = .11$, $p < .001$). Intimate partner abuse involvement indirectly predicted suicidality via alcohol-related problems, $\beta = .03$, $b = 0.026$, $p < .001$, 95% CI [0.021, 0.031]. The association between intimate partner abuse involvement and suicidality remained significant after accounting for alcohol-related problems ($\beta = .31$, $b = 0.292$, $p < .001$, 95% CI [0.269, 0.315]) although its magnitude was attenuated from the total effect ($\beta = .34$, $b = 0.318$, $p < .001$, 95% CI [0.296, 0.340]). These results suggest that alcohol-related problems partially mediated the relationship between intimate partner abuse and suicidality (Purpose 2).

We then examined whether gender moderated the observed indirect effect in a multigroup SEM approach by treating gender as a grouping variable instead of a covariate. Other model specifications were consistent with the partial mediation model. We compared two models, one with regression coefficients free to vary across two groups (the moderation model) and another with regression coefficients fixed across two groups (the no moderation model; see Figure 2). Results showed that the moderation model had a better fit to the observed data than the no moderation model, $\chi^2\Delta = 27.52$, $p < .001$. However, the obtained indirect effects did not differ by gender as suggested by the overlapping confidence intervals (indirect effect for women = 0.024, 95% CI [.018, .030]; indirect effect for men = 0.029, 95% CI [0.020, 0.038]). These results suggest that the indirect effect was not moderated by gender (Purpose 3).

Exploratory Analyses

We explored indirect effects of psychological, physical, and sexual abuse variables as separate exogenous predictors, instead of endogenous observed variables. Results showed significant sepa-

Table 2
Model Summary and Goodness-of-Fit Indices for Each Tested Model

Measure	Model		
	Partial mediation	No mediation	Full mediation
Chi-square	3,126.79	3,344.44	5,032.30
Degrees of freedom	150	151	151
RMSEA	.015	.015	.019
RMSEA 90% CI	[.015, .015]	[.015, .016]	[.019, .020]
Comparative fit index	.98	.97	.96
Tucker-Lewis index	.97	.97	.95
Weighted root mean square residual	3.89	4.02	4.93

Note. Diagonally weighted least square estimator was used for computing chi-squares. RMSEA = root mean square error of approximation; CI = confidence interval.

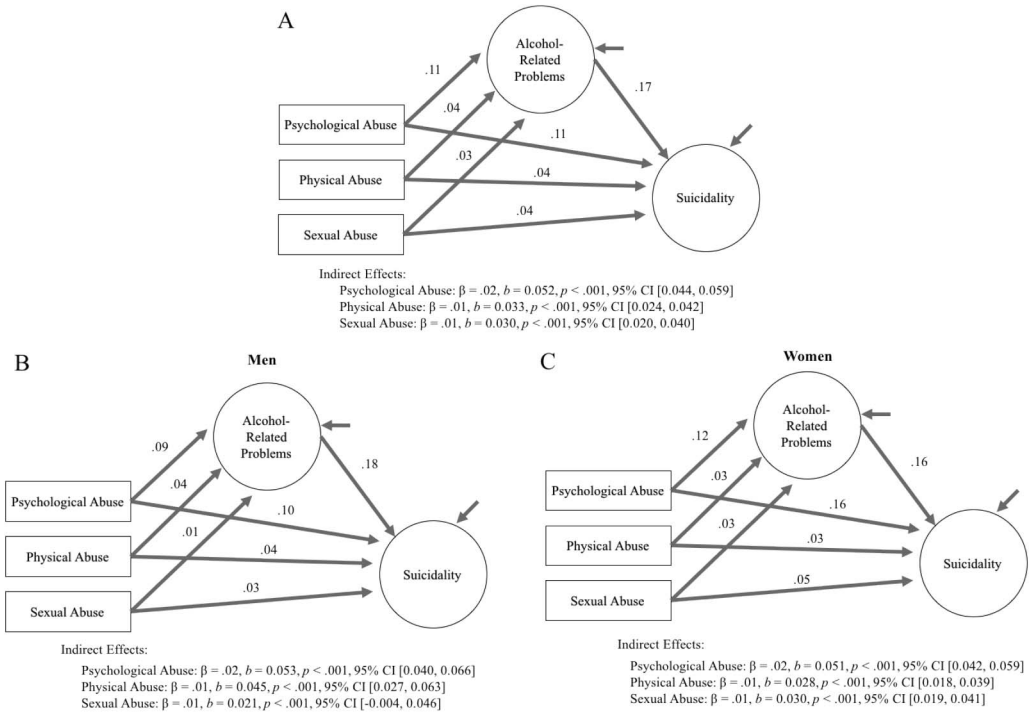

Figure 3. Exploratory structural equation modeling (SEM) models with separate abuse predictors. (A) The model treating gender as an additional control variable. Multigroup models treating gender as a grouping variable for (B) men and (C) women. Indicators used for alcohol-related problems and suicidality are consistent with the original model tested in Figure 1. All analyses were controlled for age, sex, gender, race/ethnicity, relationship status, current residence, and fraternity/sorority membership, modeled to the alcohol problems mediator and the suicidality outcome. Standardized regression coefficients are reported. All regression coefficients were significant ($p < .001$) except for the coefficient predicting alcohol-related problems by sexual abuse among men ($p = .094$). CI = confidence interval.

rate indirect effects of these variables on suicidality via alcohol-related problems (Figure 3A). Further, we explored a possibility that gender moderated these indirect effects. Results suggested that the obtained indirect effects were similar across men and women as indicated by overlapping confidence intervals (Figure 3B,3C). These results indicate that the indirect effects were not moderated by gender.

We also tested an alternative model where alcohol-related problems predict suicidality via intimate abuse. We created an alternative mediation model by switching the independent variable and the mediator in the partial mediation model in Figure 1A. The resulting model had the alcohol-related problems latent variable as the predictor and the suicidality latent variable as the mediator. We compared the fit indices of the partial mediation model and the alternative mediation model. Although Bayesian model fit indices (e.g., Bayesian information criterion) were appropriate to compare these nonnested models, we were unable to do so due to the use of the DWLS estimation instead of the maximum likelihood estimation. Thus, we examined the conventional CFIs and TLIs of the two models. Results suggested that the alternative mediation model fit the observed data poorly, suggested by the CFI (.94) and TLI (.92) below the conventional cutoff of .95 (Hu & Bentler, 1999), although the RMSEA was acceptable (.023). In contrast, the CFI (.98) and TLI (.97) of the partial mediation model reached the cutoff with the acceptable RMSEA (.015), suggesting that the original model fit the observed data relatively well. These results imply that the original mediation path (abuse involvement predicting suicidality via alcohol problems) may better represent the observed data than the alternative mediation path (alcohol problems predicting suicidality via abuse involvements).

Discussion

The present study tested whether alcohol-related problems mediated the association between intimate partner abuse involvement and suicidality in a nationally representative college student sample. Results replicated the previously suggested model (Purpose 1; Lamis et al., 2010). Consistent with our hypothesis, we found that suicidality was predicted by abusive relationship experience, and alcohol-related problems partially mediated this relationship (Purpose 2). We found that this association was not moderated by gender (Purpose 3). These results indicate a pathway predicting suicidality by intimate partner abuse involvement via alcohol-related problems and suggest that college students experiencing intimate partner abuse may be at increased risks of developing suicidality, especially with the presence of alcohol-related problems.

Limitations

The current study had several limitations. First, we were unable to demonstrate whether specific forms of abuse, alcohol problems, and suicidality are interrelated because we used latent variables to represent these factors. Although we considered this possibility by including separate abuse indicators, we were unable to make strong conclusions about the obtained results given both the exploratory nature of the analysis and use of cross-sectional data. Second, we could not perform bootstrapping for testing the mediation given the dichotomous observed variables. Similarly, the dichotomized variables did not have information about intensity and frequency of each measured construct. Third, the current study did not measure adverse childhood experiences (ACEs) and socioeconomic status, both of which might have influenced associations found in the model due to their strong associations with abuse, alcohol-related problems, and suicidality (Anda et al., 2006; Cunradi, Caetano, Clark, & Schafer, 2000; Khan, Murray, & Barnes, 2002; Rehkopf & Buka, 2006). Despite these limitations, however, we believe that the current findings would advance understanding of the role of alcohol-related problems in the association between intimate partner abuse and suicidality.

Research Implications

The current results were consistent with the previous finding that problematic alcohol use mediates the effect of intimate psychological abuse on suicide proneness among women (Lamis et al., 2010). Furthermore, the current study extended these findings in several important ways. First, we replicated such a mediation model using a large nationally representative sample of college students. Second, this mediation model held when physical abuse and sexual abuse were included in the analyses together with psychological abuse in a latent variable framework. Third, we observed that the model applies to both women and men.

The magnitude of the relationship between alcohol-related problems and suicidality was weaker in the current study compared to previous research (Lamis et al., 2010). In addition, the indirect effect via alcohol problems was smaller than previously reported, especially in contrast to the large direct effect of intimate partner abuse on suicidality. These inconsistencies may be due in part to the differences in items measuring alcohol-related problems. The current study used three items pertaining to (a) regrettable actions, (b) forgetting what one did, and (c) getting involved with the police due to drinking. On the other hand, Lamis and colleagues (2010) used the Rutgers Alcohol Problem Index (White & Labouvie, 1989) with questions referring to specific forms of alcohol problems among college students (e.g., missing class, intoxicated driving, getting in fights or arguments). Another difference is that the current study included multiple indicators of intimate partner abuse and suicidality. Despite these methodological differences, however, the current study found the mediating role of alcohol-related problems between intimate partner abuse and suicidality.

The current results offer several possible future directions for research. First, we found that intimate partner abuse involvement and problematic alcohol use were positively related. It is possible that people in such abusive relationships used alcohol to cope with the associated negative affect (Kuntsche et al., 2005). Future research may test whether people using alcohol to cope with negative affect from intimate partner abuse are at risks of suicidality. Second, intimate partner abuse involvement predicted suicidality after accounting for alcohol-related problems, as indicated by the direct effect. This suggests the presence of unexplored factors between intimate partner abuse and suicidality. One such factor may be affect dysregulation—it is possible that people involved in abusive relationships have difficulty regulating the negative affect, which could lead to suicidality. Emerging evidence suggests that anger, for example, can strengthen the relationship between sexual assault and suicidality (Keefe, Sizemore, Hammersley, & Sunami, in press). Future research should also examine other factors, including ACEs and socioeconomic status as mentioned earlier.

Clinical and Policy Implications

Previous research has called for screening of alcohol-related problems to prevent suicidality because of the strong link between problematic drinking and suicidality (Pompili et al., 2010; Sher, 2006). We echo these recommendations and add that a history of abusive relationship involvement confers additional risk. Mental health providers may reduce suicidal thinking for clients experiencing intimate partner abuse though tension-reduction interventions targeted at alcohol use. More specifically, clinicians working with such clients should integrate interventions promoting negative affect reduction strategies to reduce the overall likelihood of alcohol-related problems and suicide-related behaviors (Watkins, Schumacher, & Coffey, 2016). Given that the direct effect of abuse involvement on suicidality remained strong after accounting for alcohol-related problems, we suggest that treatment targeting coping with an abusive relationship could have a significant impact on reducing suicidality. Additionally, screening for ACEs could benefit the overall intervention effort because of their associations with intimate partner abuse, problematic drinking, and suicidality (Anda et al., 2006).

Current results imply that policy makers may reduce suicidality by targeting intimate partner abuse and problematic alcohol use. For example, college suicide prevention programs should include screening for alcohol-related problems and history of abusive relationship involvement. On a societal level, policy makers may reduce suicidality by raising tax for alcohol (Sloan, Reilly, & Schenzler, 1994), which could prevent the problematic use of alcohol.

Conclusions

Overall, the present study demonstrated that alcohol-related problems may be a pathway through which intimate partner abuse involvement predicts suicidality among college students. Results suggested that the indirect effect of intimate partner abuse on suicidality via alcohol-related problems was significant, but it was weaker than the direct effect of intimate partner abuse on suicidality. Future research is encouraged to examine relationships among the specific types of intimate partner abuse, alcohol-related problems, and suicide-related behaviors.

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