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Advancing our Understanding of the Intersection between Emotion Regulation and Alcohol and Drug Use Problems: Dyadic Analysis in Couples with Intimate Partner Violence and Alcohol Use Disorder

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Abstract

Background: An extensive body of literature has linked emotion regulation to alcohol and drug use problems, including among populations characterized by intimate partner violence (IPV). Advancing this research, the goal of the current study was to examine cognitive emotion regulation strategies and alcohol and drug use problems within a dyadic framework. Specifically, we examined actor and partner effects of maladaptive and adaptive cognitive emotion regulation strategies on alcohol and drug use problems.

Methods: Eighty-four romantic couples ($N = 168$ total participants) participating in a randomized controlled trial who reported physical IPV and an alcohol use disorder completed self-reported measures of cognitive emotion regulation as well as alcohol and drug use problems.

Results: Regarding actor effects, men's greater use of maladaptive cognitive emotion regulation strategies was positively related to their alcohol use problems ($p < .001$), whereas both women's ($p = .02$) and men's ($p = .047$) greater use of adaptive cognitive emotion regulation strategies was negatively related to their own alcohol use problems. In terms of partner effects, men's greater use of maladaptive cognitive emotion regulation strategies ($p = .001$) and less use of adaptive cognitive emotion regulation strategies ($p = .017$) was related to their partners' greater drug use problems.

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Contributors

Author NHW conceptualized the current study, conducted literature searches, and provided summaries of previous research studies. Author JH conducted the statistical analysis. Authors NHW, JH, MB, AAM, CMK, and JCF wrote the first draft of the manuscript. Author JCF was the investigator on the larger study. All authors contributed to and have approved the final manuscript.

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Conclusions: Findings replicate and extend existing work in this area, showing that men's and women's emotion regulation strategies are related to their own alcohol and drug use problems and that men's cognitive emotion regulation strategies are also related to their partners' drug use problems.

Keywords

Intimate partner violence; cognitive emotion regulation; alcohol use problems; drug use problems; dyadic analysis

1. Introduction

Intimate partner violence (IPV) is a pervasive and devastating public health concern, experienced by approximately 1 in 3 women and 1 in 4 men during their lifetime (Smith et al., 2018) and is associated with staggering physical, psychological, economic, and societal costs (Brown et al., 2008; Rivara et al., 2007; Walby, 2009). Alcohol and drug use problems are well-established and clinically significant risk factors (Jewkes, 2002; Stith et al., 2004) and consequences (Ahmadabadi et al., 2019; El-Bassel et al., 2005; Plichta, 2004) of IPV. Between 20% and 50% of all incidents of IPV occur when one or both partners are under the influence of alcohol or drugs (Hart, 2007). As described in the myopia model (Noel et al., 2013; Steele & Josephs, 1990), alcohol and drug intoxication may impair behavioral inhibition (Fillmore, 2003) and narrow attention (Bayless & Harvey, 2017), enabling violent acts (Giancola et al., 2011; Giancola et al., 2010). Alcohol and drug use problems are also commonly cited consequences of IPV, with longitudinal studies documenting higher rates of alcohol (Martino et al., 2005) and drug (Roberts et al., 2003) use problems following IPV. Prevailing models of alcohol and drug use problems, such as negative reinforcement (Baker et al., 2004) and self-medication (Khantzian, 1997), suggest that avoidance of arousal and anxiety related to IPV victimization is a central motive underlying the etiology and maintenance of alcohol and drug use problems in this population (Stewart et al., 1998). It is perhaps not surprising then that prevalence rates of alcohol and drug use disorders are significantly higher for those with IPV victimization (7.3% and 2.7%, respectively) versus those without victimization histories (2.3% and 0.4%, respectively; Okuda et al., 2011). Notably, alcohol and drug use problems among IPV-victimized individuals is linked to numerous negative outcomes including psychological distress (Sullivan & Holt, 2008), risky behaviors (Campbell et al., 2008), legal problems (Oberleitner et al., 2013), and economic strain (Peterson et al., 2018). High prevalence rates and significant impacts of alcohol and drug use problems in populations characterized by IPV underscore the importance of research in this area.

A clinically significant factor to study in relation to alcohol and drug use problems among IPV populations is emotion regulation. As defined here, emotion regulation refers to the conscious processes through which individuals monitor, evaluate, and modify emotional information (Gross, 1998). Individuals may use a variety of cognitive emotion regulation strategies to achieve this goal (Garnefski et al., 2001). Putatively adaptive cognitive emotion regulation strategies, including acceptance (i.e., thoughts of accepting what you have experienced and resigning yourself to what has happened), positive reappraisal (i.e.,

thoughts of creating a positive meaning to the event in terms of personal growth), refocus on planning (i.e., thinking about what steps to take and how to handle the negative event), positive refocusing (i.e., thinking about joyful and pleasant issues instead of thinking about the actual event), and putting into perspective (i.e., thoughts of brushing aside the seriousness of the event/emphasizing the relativity when comparing it to other events), are generally associated with better health outcomes across a wide range of contexts (Garnefski & Kraaij, 2006b, 2007; Garnefski et al., 2001; Garnefski et al., 2005). Conversely, putatively maladaptive cognitive emotion regulation strategies, including self-blame (i.e., thoughts of putting the blame for what you have experienced on yourself), rumination (i.e., thinking about the feelings and thoughts associated with the negative event), catastrophizing (i.e., thoughts of explicitly emphasizing the terror of what you have experienced), and other-blame (i.e., thoughts of putting the blame for what you have experienced on the environment or another person), are linked to poorer health outcomes (Garnefski & Kraaij, 2006b, 2007; Garnefski et al., 2001; Garnefski et al., 2005).

Past research has linked emotion regulation to alcohol and drug use problems (for reviews, see Weiss, Sullivan, et al., 2015; Weiss, Tull, et al., 2015), including among IPV populations (Ortiz et al., 2015; Weiss et al., 2018; Weiss et al., in press). For instance, IPV-victimized women with (vs. without) alcohol and drug use disorders have been found to report higher emotion dysregulation (Weiss et al., 2018). Moreover, maladaptive emotion regulation strategies are significantly associated with greater alcohol and drug use, whereas adaptive emotion regulation strategies are significantly related to less alcohol and drug use (Weiss et al., 2017). One explanation for these findings is that adaptive emotion regulation strategies lead to greater reductions in negative affect than maladaptive emotion regulation strategies (Webb et al., 2012). The affective processing model of negative reinforcement posits that escape from and avoidance of negative affect are prepotent motives for alcohol and drug use (Baker et al., 2004). Indeed, the experience of negative affect and the desire to avoid negative affect are chief motives for alcohol and drug use (Khantzian, 1997). Thus, reliance on maladaptive emotion regulation strategies may increase future motivations for alcohol and drug use, whereas adaptive emotion regulation strategies may reduce future motivations for alcohol and drug use (Cooper et al., 2016).

One critical limitation of the existing research in this area is that examination of the relations of emotion regulation to alcohol and drug use problems has occurred among only one partner in the IPV dyad. Recent statistical advances made it possible to account for the dyadic context of IPV through the use of Actor-Partner Interdependence Models (APIM; Kenny & Cook, 1999; Kenny et al., 2006). APIM allows researchers to account for both actor effects (e.g., how much one's alcohol and drug use problems are predicted by their own cognitive emotion regulation strategies) and partner effects (e.g., how much one's alcohol and drug use problems are influenced by their partner's cognitive emotion regulation strategies). Substantive literature highlights the role of situational factors (e.g., interpersonal influences) on alcohol and drug use problems (Wallace, 1999), with at least one study finding that alcohol and drug use was more common among IPV-victimized women on days when they saw their male partners (Sullivan et al., 2016). However, research in this area has just recently begun to consider the effects of both partners' behaviors on alcohol and drug use problems (Patton & Fisher, 2018), and none of this work has explored

the influence of emotion regulation. Within an IPV context, one may be more likely to engage in problematic alcohol or drug use when their partner exhibits more maladaptive cognitive emotion regulation strategies and less likely to misuse alcohol or drugs when their partner exhibits more adaptive cognitive emotion regulation strategies. For instance, use of maladaptive cognitive emotion regulation strategies may increase one's negative affect (Lavy & van den Hout, 1994); in turn, one's partner may feel less emotionally connected or experience stress-exacerbating conflict, driving them to use alcohol or drugs (Levitt & Cooper, 2010; Windle & Windle, 2019). Conversely, use of adaptive cognitive emotion regulation strategies may mitigate the likelihood of partner alcohol and drug use problems, perhaps by eliciting in them feelings of support, shown to buffer against the development of alcohol and drug use problems (Jarnecke & South, 2014). These partner effects may be stronger for women partners versus men partners (Cranford et al., 2015; Levitt & Cooper, 2010; Windle & Windle, 2019).

Advancing current research, the goal of the present study was to examine emotion regulation and alcohol and drug use problems within a dyadic framework. Specifically, using a sample of couples with IPV, we explored actor and partner effects of maladaptive and adaptive cognitive emotion regulation strategies on alcohol and drug use problems. Consistent with existing research in IPV samples (Ortiz et al., 2015; Weiss et al., 2018; Weiss et al., in press), we expected that for both men and women, actor maladaptive cognitive emotion regulation strategies would positively associate with actor alcohol and drug use problems and that actor adaptive cognitive emotion regulation strategies would negatively associate with actor alcohol and drug use problems. Additionally, we hypothesized that for both men and women, actor maladaptive cognitive emotion regulation strategies would positively relate to partner alcohol and drug use problems and actor adaptive cognitive emotion regulation strategies would negatively relate to partner alcohol and drug use problems. Finally, we expected stronger effects for women (Cranford et al., 2015; Levitt & Cooper, 2010; Windle & Windle, 2019).

2. Material and Methods

2.1 Procedures and Participants

Eighty-four couples (168 total participants) were enrolled in a larger, ongoing randomized controlled trial that examined the effects of oxytocin on alcohol craving and aggression between partners in the laboratory. This study only examined data collected at baseline prior to medication administration. Participants were eligible to participate in the larger study if both members of the couple (1) were between ages 18 and 75 years, (2) were fluent in English, (3) endorsed at least one instance of mild or moderate physical intimate partner violence in their current relationship as assessed by the Revised Conflict Tactics Scales (CTS2; Straus et al., 1996, 2003), and (4) agreed to participate in the study. Additionally, at least one member of the couple was required to meet *Diagnostic and Statistical Manual of Mental Disorders*, fifth edition (American Psychiatric Association, 2013) criteria for alcohol use disorder (AUD). Interested participants were excluded from the study if they (1) were pregnant or breastfeeding, (2) endorsed current/past psychiatric or medical conditions that could interfere with neuroendocrine functioning, (3) endorsed current suicidal ideation

and intent, (4) reported a history of severe physical or sexual intimate partner violence within their current relationship as defined by the CTS2 (Straus et al., 1996, 2003), (5) began psychotropic medication within the four weeks prior to screening, (6) evidenced acute alcohol withdrawal as indicated by a score of 8 or greater on the Clinical Institute Withdrawal Assessment of Alcohol Scale, Revised (Bernstein et al., 2003), or (7) endorsed a history of epilepsy or seizures. Due to inadequate power to test the effects of sex constellations within couples, same-sex couples were excluded from analyses. Thus, 78 different-sex couples comprised the final sample for the present study.

2.2 Measures

2.2.1 Emotion regulation was assessed using the 18-item Cognitive Emotion Regulation Questionnaire – Short (CERQ-Short; Garnefski & Kraaij, 2006a).—

The CERQ-Short assesses participants' use of specific adaptive and maladaptive cognitive emotion regulation strategies in response to stressful events. The Adaptive Cognitive Emotion Regulation Strategies subscale score was calculated by summing 10 items across the CERQ-Short's five, two-item, adaptive emotion regulation subscales: *Acceptance* (e.g., "I think that I have to accept that this has happened"), *Positive Refocusing* (e.g., "I think of pleasant things that have nothing to do with it"), *Refocus on Planning* (e.g., "I think about a plan of what I can do best"), *Positive Reappraisal* (e.g., "I think that I can become a stronger person as a result of what has happened"), and *Putting into Perspective* (e.g., "I think that it hasn't been too bad compared to other things"). The Maladaptive Cognitive Emotion Regulation Strategies subscale score was calculated by summing 8 items across the CERQ-Short's four, two-item, maladaptive emotion regulation subscales: *Self-Blame* (e.g., "I think that basically the cause must lie within myself"), *Rumination* (e.g., "I am preoccupied with what I think and feel about what I have experienced"), *Catastrophizing* (e.g., "I keep thinking about how terrible it is what I have experienced"), and *Other-Blame* (e.g., "I feel that basically the cause lies with others"). Respondents reported how often they used each strategy to cope with stressful events (1 = *almost never*, 5 = *almost always*) and responses were summed for each subscale such that higher scores represent more frequent use of adaptive or maladaptive cognitive emotion regulation strategies. The CERQ-Short has evidenced good psychometric properties (Garnefski & Kraaij, 2006a). Internal reliability for the CERQ-Short Adaptive Emotion Regulation ($\alpha = .83$) and Maladaptive Emotion Regulation ($\alpha = .75$) scales was adequate and acceptable, respectively, within the present study.

2.2.2 The 10-item Alcohol Use Disorders Identification Test (AUDIT; Babor et al., 2001; Saunders et al., 1993) assessed past 12-month alcohol use problems.—

The AUDIT examines the intensity and frequency of alcohol use, negative consequences of alcohol use, and symptoms of alcohol tolerance and dependence. Scores were summed for a possible total score range from 0 to 40; higher scores represented greater alcohol use problems. The AUDIT has demonstrated strong psychometric properties (Saunders et al., 1993). Internal consistency for the AUDIT in the current sample was adequate ($\alpha = .89$).

2.2.3 The 10-item Drug Abuse Screening Test (DAST-10; Skinner, 1982) assessed past six-month drug use problems, including physical, social, occupational, and legal consequences of drug use.—Participants responded either “yes” (1) or “no” (0) to each item; items were summed such that greater scores indicated greater drug use problems. Possible total scores ranged from 0 to 28. The DAST-10 showed strong psychometric properties (Yudko et al., 2007). Internal consistency for the DAST-10 in the current sample was adequate ($\alpha = .74$).

2.3 Data Analytic Strategy

All analyses were conducted within a multilevel modeling (MLM) framework (Raudenbush & Bryk, 2002). MLM uses a nested data structure to account for the inherently interdependent nature of dyadic data. For these analyses, individual partners (level 1) were “nested” within couples (level 2). Hypotheses were tested using an APIM, a specialized MLM that affords a deeper understanding of partner dynamics. In an APIM, it is possible to determine how each predictor impacts both one’s own outcome (the actor path) and one’s partner’s outcome (the partner path; Cook & Kenny, 2005). As gender differences were predicted for these associations, distinguishable dyads were used, meaning separate actor and partner paths were estimated for men and women within the sample. Two distinguishable dyad APIMs were estimated, one to test associations between cognitive coping strategies and alcohol use problems and another to test associates between cognitive coping strategies and drug use problems. All analyses were conducted using a Poisson distribution to account for skew in the data. Accordingly, coefficients reported are in log units.

3. Results

Preliminary Analyses

Participants’ ages ranged from 19 to 67 years with a mean age of 34.51 ($SD = 10.59$). Participants identified as primarily white (65.4%), followed by Black/African American (24.4%), more than one race (5.8%), Asian (1.9%), and Native American/Alaskan Native (1.3%); 1.3% of participants did not report their race. Participants were 91.1% non-Hispanic and 7.7% Hispanic; 1.2% of participants did not report their ethnicity. With regard to their romantic relationships, most participants reported that they were not married but were living with their partner (49.4%), followed by married (31.4%), dating but not living with their partner (12.2%), separated (1.9%), or divorced (1.9%); 3.2% of participants did not report their relationship status. On average, the length of participants’ current relationship was 6.65 years ($SD = 6.74$ years). Participants completed an average of 13.76 years of school ($SD = 2.47$ years), were mostly employed full-time (44.9%) or part-time (23.7%), and reported an average household income of \$65,430.16 ($SD = \$98,707.85$). Participants reported a mean psychological IPV score of 34.57 ($SD = 36.45$) and a mean physical IPV score of 31.96 ($SD = 46.20$) on the CTS2 (Newton et al, 2001).

The Mini-International Neuropsychiatric Interview (Sheehan et al., 1998) was used to assess current AUD and psychiatric conditions. Inclusion of participants with concurrent drug use disorders was allowable given the marked co-occurrence with AUD. Most participants

(78.8%) met criteria for AUD within the previous twelve months. Among participants who met criteria for AUD, 32.1% reported mild AUD, 22.1% were moderate, and 45.8% reported severe AUD. Additionally, 39.1% of participants also met criteria for a drug use disorder (i.e., 65.6% cannabis use disorder, 27.9% for stimulant use disorder, and 6.6% for another drug use disorder). A small percentage (11.4%) met criteria for generalized anxiety disorder. Approximately half (46.7%) of participants reported experiencing at least mild symptoms of depression ($M = 5.41$, $SD = 5.33$) as measured by the Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001).

Several demographic variables were tested as covariates. Relationship status and length, race, ethnicity, and education level were not associated with either drug or alcohol problems and were not included in the final model. Both depression symptoms and current generalized anxiety disorder were significantly related to drug- and alcohol-related problems (r s ranging from .18 to .33, p s ranging from .03 to $< .001$) and thus were included in the final analyses.

Primary Analyses

Table 1 presents means, standard deviations, and correlations for all study variables. Men ($M = 10.65$) and women ($M = 11.41$) reported significant alcohol problems, where scores greater than 8 indicate hazardous alcohol use. Conversely, both men ($M = 2.91$) and women ($M = 1.88$) reported nonsignificant drug problems, where scores greater than 6 indicate hazardous drug use.

Full results from both models are presented in Table 2. Model 1 tested associations between cognitive emotion regulation strategies and alcohol-related problems. In this model, men's maladaptive cognitive emotion regulation strategies ($B = .04$, $p = .005$) were significantly positively associated with their own alcohol use problems. Additionally, women's ($B = -.02$, $p = .03$) adaptive cognitive coping strategies were significantly negatively associated with their own alcohol use problems. Model 2 tested associations between cognitive emotion regulation strategies and drug-related problems. In this model, men's positive ($B = -.06$, $p = .001$) and negative ($B = .06$, $p = .017$) cognitive coping strategies were significantly associated with their female partner's drug use problems.

4. Discussion

The current study used a dyadic framework to assess actor and partner relationships between emotion regulation and alcohol and drug use problems among different-sex couples with IPV and AUD. In partial support of study hypotheses, men's greater use of maladaptive cognitive emotion regulation strategies was significantly positively associated with their own alcohol use problems. Moreover, women's greater use of adaptive cognitive emotion regulation strategies was significantly negatively associated with their own alcohol use problems. Further, men's greater use of maladaptive cognitive emotion regulation strategies was significantly positively associated with women's drug use problems. Finally, men's greater use of adaptive cognitive emotion regulation strategies was significantly negatively associated with their partners' drug use problems. Findings advance our understanding of the association between emotion regulation and alcohol and drug use problems.

Regarding actor relations, our findings suggest that among individuals in relationships characterized by IPV, men's (but not women's) greater use of maladaptive cognitive emotion regulation strategies was significantly positively associated with their own alcohol (but not drug) use problems. In terms of our unexpected finding for women, there is some evidence to suggest that maladaptive cognitive emotion regulation strategies in the context of relationship conflict may at times be adaptive. Maladaptive cognitive emotion regulation strategies may result in short-term reductions in stress and anxiety tied to threatening stimuli (Bradizza et al., 2018; Conklin et al., 2015). Specific to IPV, maladaptive cognitive emotion regulation strategies may reduce both conflict in the context of physical threat and distress associated with victimization (Milojevich et al., 2019). Moreover, use of such strategies may counter the tendency toward feelings of failure or hopelessness in solving conflict in relationships characterized by IPV (Fine, 1992). Consistent with these suggestions, maladaptive cognitive emotion regulation strategies are associated with more adaptive outcomes for individuals in environments perceived as uncontrollable (Ford & Gross, 2019), such as in the context of IPV (Hamberger et al., 2017). As such, use of maladaptive cognitive emotion regulation strategies among women in IPV relationships may be at times situationally adaptive and thus not show expected relations with negative outcomes such as alcohol and drug use problems. Future research in this area would benefit from the application of methods that may capture the contextually-dependent nature of maladaptive cognitive emotion regulation strategies, such as ecological momentary assessment (Trull & Ebner-Priemer, 2009). Conversely, our findings for cognitive emotion regulation strategies among men were as expected for alcohol (but not drug) use problems. This result may be attributed to our sample, which was comprised of couples in which at least one partner met criteria for AUD. Perhaps alcohol use was more problematic in this sample than drug use and thus more strongly tied to maladaptive emotional responding. Investigations are needed to examine whether this finding extends to other samples of men in IPV relationships.

As partially expected, women's greater use of adaptive cognitive emotion regulation strategies was significantly negatively associated with their own alcohol (but not drug) use problems. Findings align with literature on the protective value of emotion regulation (Troy & Mauss, 2011) and suggest that adaptive cognitive emotion regulation strategies may play a key role in alcohol use problems among women in couples with IPV (Scheer & Mereish, in press). Given evidence that adaptive and maladaptive cognitive emotion regulation strategies often co-occur (e.g., multiple strategies may be required to reduce distress; Dixon-Gordon et al., 2015), future studies are needed to explore the interaction between adaptive and maladaptive cognitive emotion regulation strategies in conferring protection versus risk for alcohol and drug use problems. One study found that individuals in an emotion regulation class characterized by adaptive strategies reported significantly less psychopathology compared to those in classes characterized by maladaptive strategies or adaptive *and* maladaptive strategies (Dixon-Gordon et al., 2015). These findings suggest that adaptive strategies may lose their protective value in the context of maladaptive strategies. Future research is needed to address this hypothesis among couples who experience IPV. Of note, as was mentioned above, our unexpected finding for drug use problems may be a result of the AUD inclusion criteria here. Research that explores these relations among men and women with drug use disorders are necessary.

Finally, in regards to partner effects, men's use of maladaptive and adaptive cognitive emotion regulation strategies was significantly associated with women's drug (but not alcohol) use problems, such that women were more likely to report drug use problems when their male partners reported greater maladaptive and fewer adaptive cognitive emotion regulation strategies. Past research provides some potential explanations for these findings. Men's negative affect (often resultant from maladaptive emotion regulation strategies; Lavy & van den Hout, 1994) may lead their partners to feel less emotionally connected to them or increase relational conflict, both of which are associated with greater risk for substance misuse in women (Levitt & Cooper, 2010; Windle & Windle, 2019). In contrast, men's adaptive cognitive emotion regulation strategies may elicit feelings of support in their partners, which, in turn, may decrease the odds of drug use problems among women (Jarnecke & South, 2014). Notably, our findings suggest that partner effects are specific to women's outcomes: neither men's alcohol nor drug use problems were influenced by women's cognitive emotion regulation strategies. These results are consistent with prior research suggesting that partner effects may influence women's behavior more than men's (Kiecolt-Glaser & Newton, 2001). Future investigations are needed to better understand these sex differences as they relate to alcohol and drug use in the context of IPV.

Although results of the present study add to the literature on emotion regulation and alcohol and drug use problems, findings must be interpreted in light of its limitations. First, the cross-sectional and correlational nature of the data precludes determination of the precise nature, direction, and temporal ordering of the relations examined here. For instance, it is possible that the relationship between maladaptive emotion regulation strategies and alcohol and/or drug use problems is reciprocal, such that both earlier maladaptive emotion regulation strategies increase later alcohol and drug use as well as earlier alcohol and drug use increase later maladaptive emotion regulation strategies (Weiss et al., 2017). Second, although our use of a dyadic framework with couples who experience IPV may be considered a strength of this study, inclusion and exclusion criteria limit the generalizability of findings. For instance, although couples with severe IPV were eligible provided no acute safety concerns were present, it is possible that this study's focus on intact couples might have created a ceiling effect with regard to IPV severity. Further, this study required that one, but not both, partners within each dyad met diagnostic criteria for AUD. Alcohol use discrepancies between partners within a dyad remains an intense area of scientific inquiry (Bartel et al., 2017; Homish & Leonard, 2007; Mushquash et al., 2013), and this construct might have short- and long-term effects on each partner's emotion regulation strategies. Nonetheless, use of a sample with an alcohol – but not drug – use disorder inclusion criterion likely resulted in lower drug vs. alcohol use problem scores. Third, not all drugs have the same pharmacologic effects, acutely or in the long-term (Lowinson, 2005), and this study did not distinguish between specific drugs. Fourth, the larger sample only included five same-sex couples. Because we were not powered to test the effects of sex constellations within couples, these same-sex couples were excluded from analyses. Finally, while outside the scope of the current paper, future research is needed to identify psychological processes that underlie the relationship between cognitive emotion regulation strategies and alcohol and drug use problems, including psychiatric disorders such as depression and anxiety.

Despite these limitations, our findings underscore the potential utility of targeting cognitive emotion regulation strategies in the treatment of individuals or couples with IPV who present with alcohol and/or drug use problems. Indeed, deficits in emotion regulation predict alcohol consumption during and after cognitive behavioral treatment for AUD (Berking et al., 2011) and persist beyond acute alcohol and drug treatment efforts (Fox et al., 2007; Fox et al., 2008), perhaps resultant from emotion regulation's association with craving (Garland et al., 2014). Further, treatments have utility in reducing alcohol and drug use problems via emotion regulation (Axelrod et al., 2011). Regarding emotion regulation interventions aimed at interpersonal conflict specifically, Rodriguez et al. (2019) found evidence for the utility of a single-session, conflict-focused, brief cognitive reappraisal intervention in improving emotion regulation. Specifically, this intervention asked participants to write about an interpersonal conflict from the perspective of someone neutral who has the best interests of everyone at heart, suggesting the benefits of perspective-taking. These results underscore the potential value of targeting perspective-taking in couple's therapy as a means of improving emotion regulation. Future studies are needed to examine whether treatments targeting an increase in adaptive cognitive emotion regulation strategies and a decrease in maladaptive cognitive emotion regulation strategies—such as through perspective-taking—influence alcohol and/or drug use problems among individuals and their partners in relationships characterized by IPV.

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Highlights

- Men's maladaptive strategies were positively related to their own alcohol problems
- Women's adaptive strategies were negatively related to their own alcohol problems
- Men's maladaptive strategies positively related to their partners' drug problems
- Men's adaptive strategies negatively related to their partners' drug problems

Table 1

Descriptive Statistics and Bivariate Correlations

Variable	Female Partner		Male Partner		1	2	3	4	5	6
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>						
1. Adaptive Emotion Regulation	31.75	7.43	31.97	7.15	-.05	.42***	-.07	-.15	-.31	-.04
2. Maladaptive Emotion Regulation	19.92	5.90	18.53	4.64	-.04	-.10	.29***	.08	.26*	.15
3. Alcohol Use Problems	10.65	8.10	11.41	7.25	-.23**	-.003	-.04	.54***	.47**	.08
4. Drug Use Problems	1.88	2.21	2.99	2.62	-.08	.15	.37***	.17*	.40**	.04
5. Depression Symptoms	5.34	4.88	5.38	5.81	-.04	.14	.17	.14	.004	.37**
6. Generalized Anxiety Disorder					.08	.25*	.26*	.37**	.34**	.094

Note. The results for female partners ($n = 76$) are shown below the diagonal. The results for male partners ($n = 76$) are shown above the diagonal. Within-couple correlations are presented in the shaded area on the diagonal. Generalized anxiety disorder is a dichotomous variable. Thus, no mean or standard deviation is presented for this variable.

* $p < .05$,

** $p < .01$,

*** $p < .001$.

Table 2

Actor-Partner Interdependence Modeling Coefficients for Models Predicting Alcohol and Drug Use Problems

Parameters	AUDIT			DAST		
	<i>B</i>	<i>SE B</i>	95% CI	<i>B</i>	<i>SE B</i>	95% CI
Male Partner Predictors						
Intercept	2.37***	.06	[2.253, 2.483]	.87***	.12	[.639, 1.097]
Positive Emotion	-.01	.01	[-.030, .005]	-.03 ⁺	.02	[-.063, .004]
Regulation _{Actor}						
Positive Emotion	.002	.01	[-.013, .017]	.01	.01	[-.014, .044]
Regulation _{Partner}						
Negative Emotion	.04**	.01	[.012, .069]	.03	.03	[-.024, .081]
Regulation _{Actor}						
Negative Emotion	-.01	.01	[-.034, .005]	-.004	.02	[-.041, .033]
Regulation _{Partner}						
Female Partner Predictors						
Intercept	2.23***	.06	[2.112, 2.351]	.34*	.13	[.080, .594]
Positive Emotion	-.02*	.01	[-.033, -.002]	.02	.02	[-.009, .054]
Regulation _{Actor}						
Positive Emotion	.01	.01	[-.005, .031]	-.06**	.02	[-.098, -.023]
Regulation _{Partner}						
Negative Emotion	.01	.01	[-.010, .029]	.02	.02	[-.022, .058]
Regulation _{Actor}						
Negative Emotion	.001	.01	[-.027, .030]	.07*	.03	[.013, .127]
Regulation _{Partner}						
Covariates						
Depression Symptoms	.03***	.01	[.014, .039]	.01	.01	[-.015, .037]
Generalized Anxiety Disorder	.30**	.10	[.096, .505]	.10	.20	[-.295, .498]

Note.

⁺ $p < .10$,* $p < .05$,** $p < .01$,*** $p < .001$.