The Couple that Smokes Together: Dyadic Marijuana Use and Relationship Functioning during Conflict

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Abstract

BACKGROUND—Self-reported marijuana use has been associated with poor relationship functioning and decreased stability over time. The present study examined the behavioral interactions of couples with concordant and discordant patterns of marijuana use during conflict, using individual self-reports and observation by independent coders.

METHOD—Heavy drinking community couples (N = 149) participated in a conflict resolution paradigm. Interactions were recorded and coded by naïve coders. Approximately 30% of the sample reported past year marijuana use. Actor-Partner Interdependence Models and ANCOVA were used to evaluate the individual and interactive effects of dyadic marijuana use on maladaptive relationship functioning.

RESULTS—A robust actor X partner marijuana use interaction was detected for a range of behavioral outcomes, assessed by both self-report and direct observation, including relationship satisfaction, anger experience, patterns of demand and withdrawal during conflict, constructive behaviors, and overall relationship quality. Specifically, couples in which both partners used or abstained from marijuana displayed more adaptive relationship functioning across indicators relative to couples in which only one partner was a marijuana user. This pattern was particularly strong for couples in which the female partner used marijuana and the male partner did not.

CONCLUSIONS—Couples with discordant, rather than concordant, marijuana use display distinct conflict resolution behaviors that are consistent with the long-term negative relationship outcomes that have been observed in previous studies.

Keywords

Marijuana; dyadic use; Anger; Relationship Satisfaction; Actor-Partner Interdependence Model

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The negative effects of general substance use on individual health (e.g., Grönbaek, 2009) and relationship outcomes (e.g., Stith, Smith, Penn, Ward, & Tritt, 2004) have been described in the addiction literature and most compellingly assessed through prospective, longitudinal research (e.g., Leonard & Eiden, 2007). Researchers generally report that marijuana use is associated with decreased relationship stability and greater maladaptive functioning. One investigation following a cohort of adolescents through age 25 found that marijuana use was negatively associated with relationship satisfaction, even after controlling for family of origin and mental health conditions (Fergusson & Boden, 2008). Brook and colleagues (2008) followed 534 adolescents through their mid-twenties, largely corroborating the findings of Fergusson and Boden (2008) in reporting that marijuana use was associated with greater relationship conflict and instability in young adulthood after controlling for variability in individual and family of origin factors. Yet another study followed 454 adolescents to age 23, finding that marijuana use was associated with divorce only before controlling for comorbid alcohol use (Collins, Ellickson, & Klein, 2007). Further, meta-analytic reviews have established small but significant relationships between marijuana use and indicators of more pathological relationship functioning, such as physical intimate partner aggression (IPA; e.g., Moore et al., 2008; Stith et al., 2004). Testa and Brown (2015) recently reviewed the accumulated research, detecting evidence for a distal effect of marijuana use on IPA over time while concluding that there is little support for proximal effects. The etiology of this relationship, as well as the sources of inconsistency across studies investigating the association between marijuana use and relationship functioning, however, are not clearly understood.

The dyadic context in which relationship behaviors occur may provide a partial explanation for observed variability across investigations. Theory posits that unilateral substance use within a relationship contributes to a diminished capacity to efficiently process information and resolve conflict over time (e.g., Quigley & Leonard, 1999). Shared substance use or abstinence, however, connotes a degree of common interests and values as well as mutual experiences of positive affect and behavioral responding elicited through shared use (e.g., Levitt & Cooper, 2010; Testa et al., 2014). Prior investigations into distal associations have found that dyadic alcohol, tobacco, and marijuana use is key to understanding the long-term effects of substance use on relationship outcomes with discrepant use associated with greater relationship instability and maladaptive functioning over time(Homish & Leonard, 2007; Homish, Leonard, Kozlowski, & Cornelius 2009). Several studies have now examined the association between marijuana use and relationship functioning using this dyadic approach. Among a sample of 642 newlywed couples, those who reported concordant use in which both partners or neither partner used marijuana or other drugs, reported significantly higher relationship satisfaction than husbands and wives in relationships characterized by

discordant substance use ($d = .47$; Mudar, Leonard, & Soltysinski, 2001). Further examination of this sample revealed that couples in which either or both partners consumed marijuana were more likely to experience relationship disruption within the first nine years of marriage than couples in which neither partner consumed marijuana (Leonard, Smith, & Homish, 2014). The effect was no longer significant, however, after controlling for alcohol and tobacco use. Fleming, White, and Catalano (2010) analyzed data provided by a sample of 909 adolescents with an average age of 18.2 (SD = 0.3) years and found that relationship quality was negatively associated with marijuana use only among participants with partners who used little or no marijuana. Among participants with partners who reported regular marijuana use, participant marijuana use was positively associated with relationship quality.

One recent longitudinal analysis has used a dyadic approach to evaluate the association between marijuana use and relationship functioning through the proxy of behavioral aggression. The analysis of couples' data revealed that concordant marijuana use was associated with the lowest levels of subsequent IPA perpetration over the first nine years of marriage (Smith et al., 2014). Marijuana use among a subset of violent females was associated with greater IPA and the most frequent aggression was reported among discordant couples in which the female frequently used marijuana and the male did not. Together, these dyadic analyses are consistent with previous findings that couples with concordant characteristics report more positive relationship functioning, including high satisfaction and nonviolent behavior, than couples who evidence discordant characteristics (e.g., Homish & Leonard, 2007). Each of these investigations has relied exclusively upon self-report survey data to support distal associations between discordant marijuana use and global indicators of maladaptive relationship functioning. To date, however, there are no data pertaining to the association between dyadic marijuana use and situational behavioral responding to determine whether the distal relationship is an observable phenomenon at the event level. No prior investigations have assessed how patterns of marijuana use within couples manifest during direct interactions to explain long-term deficits in relationship satisfaction, stability, and quality.

The current investigation involved evaluating the relationship between dyadic marijuana use patterns and relationship functioning among couples who engaged in conflict resolution within a laboratory setting. Although the study was originally designed to evaluate the proximal effects of alcohol intoxication on aggressive behavior, examination of the baseline interaction allowed us to evaluate the distal association between marijuana use and relationship functioning as indexed by pre-existing traits or affective and behavioral responding to conflict. The current study evaluated the association between patterns of dyadic marijuana use and conflict resolution behaviors. We hypothesized that discordant, compared to concordant, marijuana use within dyads would be associated with greater maladaptive relationship functioning, including a) self-reported relationship satisfaction and proximal anger experienced during conflict resolution and b) observed anger expression, demand/withdrawal patterns, constructiveness, and relationship quality during conflict resolution.

Method

Participants

The current sample of 149 community couples was recruited to participate in a study designed to evaluate the effects of acute dyadic alcohol intoxication on behavioral responding during provocation [Author Citation]. Couples responded to mailings, periodical, and social media advertisements. Telephone screening established study eligibility, including involvement in a marital or cohabiting relationship for at least one year, being between 21 and 45 years of age, monthly heavy drinking, and willingness to participate with an intimate partner. Exclusion criteria included pregnancy and other medical and psychiatric contraindications of alcohol use, as well as evidence of severe IPA (e.g., use of a weapon against a partner). Couples in which either partner reported daily marijuana use were also deemed ineligible for participation. Participants within 387 eligible couples were compensated $20 for independently completing and submitting a comprehensive battery of baseline measures via U.S. mail. Two-hundred thirty-five couples did not complete the laboratory study, primarily due to ineligibility (n = 108), scheduling conflicts or participant refusal (n = 88), and an inability to contact the couple (n = 25). A total of 152 couples participated in subsequent laboratory procedures. Two couples were dropped from the current analyses after providing incomplete data and evidencing extreme behavior during the laboratory task (i.e., outliers with scores exceeding three standard deviations above the mean). One couple was excluded from analyses because the female partner failed to provide marijuana use data. The resulting sample consisted of 149 heterosexual couples. This study was approved by the appropriate Social and Behavioral Sciences Institutional Review Board.

Measures

Contained within the mailed screening packet were questionnaires assessing demographic data, antisocial behavior, alcohol use, relationship aggression, relationship satisfaction, anger experience, and marijuana use.

Participants responded to a modified, 28-item version of the Antisocial Behavior Checklist (ASBC; Zucker, 2005) to assess lifetime antisocial and deviant behavioral tendencies (α = .85 for males, .82 for females).

The Alcohol Dependence Scale (ADS; Skinner & Allen, 1982) consists of 25 items with higher scores depicting greater alcohol dependence (α = .70 for males, .63 for females).

The Revised Conflict Tactics Scale (CTS-2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996), a 78-item inventory, was administered to assess IPA perpetration and victimization. For the purposes of the current study, individual participants were classified as relationally violent during the past year if the participant reported use of violence or the participant's partner reported victimization on the 12-item physical assault subscale of the CTS-2 (α = .77 for males, .83 for females).

The Dyadic Adjustment Scale (DAS; Spanier, 1976) contains 32 items assessing relationship adjustment and satisfaction. DAS scores below 98 represent significant relationship

dissatisfaction, while higher scores reflect increasing satisfaction with a current relationship (α = .90 for males, .93 for females).

Marijuana use during the year prior to participation was assessed using two study-specific items, including "Have you used marijuana in the past year?" and "How many times have you used marijuana in the past 90 days?" Participants who self-reported any marijuana use on either item were classified as marijuana users. Fifty males reported use in the past year with estimates ranging from zero to 70 times in the past 90 days. Thirty-four females reported use in the past year with estimates ranging from zero to 30 times in the past 90 days. Concordant dyads were comprised of partners who both reported marijuana use or abstinence during the past year. Couples in which one partner reported past-year use and the other did not were classified as discordant dyads.

Procedure

Conflict Resolution paradigm—Eligible couples who completed the comprehensive screening packet were scheduled to attend a laboratory session. All participants were instructed to refrain from alcohol and drug use for 24 hours prior to their participation in the laboratory study. The full laboratory procedure is described elsewhere [AUTHOR CITATION]. Briefly, couples were greeted by a male and female pair of experimenters, who described the procedure and collected informed consent. The dyad worked together to generate and then independently rank a list of relationship-specific conflict topics on a scale of increasing severity ranging from one to ten (Leonard & Roberts, 1998). Consistent with previous use of the conflict resolution paradigm, scores were averaged and couples were assigned to discuss their second most severe conflict during their first interaction and their most severe during the second interaction, thus reflecting the natural progression of conflict from minor to severe disagreement and allowing the maximum exposure to provocation during the second, experimental interaction (e.g., Leonard & Roberts, 1998). Because the proximal effects of alcohol may confound the association between marijuana use and relationship functioning, the current analyses focused exclusively on this first interaction rather than the second, which followed the randomized administration of alcohol. The effects of alcohol on aggressive responding have been described by [AUTHOR CITATION] and will not be repeated here.

Participants were given 15 minutes and told to work toward a resolution for the specified conflict topic. Couples were informed that the interactions were being digitally recorded and that an experimenter would be observing the sessions from an adjoining control room. Following the interaction, participants were separated to complete ratings of the interaction, including an estimate of their own level of anger experience during the interaction. To diffuse any potential negative feelings elicited by the conflict resolution task, couples were led through an exercise designed to focus on positive relationship events. Once BrAC of both partners was below .03%, each participated in an individual debriefing, and received $45 – $90 in compensation depending upon alcohol condition prior to being driven home via taxi. Study personnel conducted a follow-up safety screening with participants within 48 hours of their participation.

Naïve Coding—Each interaction was digitally recorded and independently coded by a minimum of three research assistants. The research assistants had not been previously involved with the study and received only the instructions necessary to complete their task. The coders were given a brief coding manual describing a set of interpersonal behaviors that they would be charged with identifying while reviewing each couple interaction. The manual was based upon an existing naïve coding scheme for evaluating communication among distressed couples (Baucom, Baucom, & Christensen, 2012). The current manual was compiled and presented to research assistants by a set of content experts, including the first and second author. Coders participated in 3 hours of initial training, completed and discussed a set of sample cases, and met with research staff as needed throughout the two-month coding period to ensure continued adherence.

Interactions were divided into three segments of roughly five minutes in duration. Coders were instructed to report the degree to which they observed three interpersonal behaviors during each segment and then provided two global ratings at the end of each full interaction. Coders used a rating scale ranging from one to ten for each item. Interrater reliability across coders was generally high. Coders first rated the couple interaction on *constructiveness*, defined as an open, honest, and respectful exchange ($\alpha = .79$). Coders were instructed to report *demand/withdrawal* behaviors only when one partner pursued or pressed for a resolution to the conflict while the other avoided or became defensive about the issue ($\alpha = .76 – .77$). Coders also reported the degree to which each partner expressed *anger* ($\alpha = .81 – .84$) as evidenced by verbal content, tone, and nonverbal actions. Finally, coders provided a global rating of *relationship quality* based upon the interaction as a whole, including the coping and conflict resolution skills exhibited by both participants ($\alpha = .80$).

Analyses

Outcomes assessed at the level of the individual (i.e., relationship satisfaction, anger experience, anger expression, and demand/withdrawal) were modeled using the Actor-Partner Interdependence Model (APIM; Kenny, Kashy, & Cook, 2006). This multi-level modeling approach accounts for the interdependence between individual partners engaged in the same interaction while allowing for separate estimates of actor and partner effects on observed individual outcomes. Individual, Level-1 data (e.g., marijuana use) were nested within couples at Level-2 (Laurenceau & Bolger, 2005).

Maximum likelihood estimation revealed that, relative to models that treated gender as a distinguishing variable, the constraints required for an indistinguishable model did not significantly worsen the fit when assessing satisfaction [$\chi^2(9) = 15.25$, $p = .08$] or anger experience [$\chi^2(9) = 8.28$, $p = .51$] but did when assessing anger expression [$\chi^2(9) = 25.79$, $p < .01$] and demand/withdrawal [$\chi^2(9) = 18.14$, $p = .03$]. These results indicate that couple members were distinguishable by gender when assessing the outcomes of anger expression and demand/withdrawal. For consistency across models, the main effect of gender was retained in all analyses. We detected no significant gender interaction effects and all gender interaction terms were trimmed to present the most stable, parsimonious models. Thus, actor and partner coefficients were pooled across male and female participants to represent robust, gender neutral effects (Kashy & Donnellan, 2012; Kenny et al., 2006).

APIM was used to evaluate the relationships between marijuana use and all control variables. Primary models evaluated the effects of individual and dyadic marijuana use while controlling for potentially spurious factors that were self-reported on the screening packet, including actor antisocial behavior, alcohol dependence, age, previous IPA perpetration as well as participant conflict severity rating as reported prior to the interaction. Inclusion of partner control variables (i.e., partner age, antisocial behavior, alcohol dependence scores, and past year aggression) and interactions among actor and partner control variables (i.e., actor age X partner age, actor antisocial behavior X partner antisocial behavior, actor alcohol dependence X partner alcohol dependence, and actor past aggression X partner past aggression) resulted in changes to neither the direction nor the significance of the observed interaction effects between actor and partner marijuana use. Final models control only for actor variables.

Outcomes assessed at the level of the couple (i.e., constructiveness and relationship quality) were modeled using univariate ANCOVAs. Levene's test for equal variances was used to determine homogeneity of variance across the four configurations of dyadic marijuana use on both couple-level outcomes of constructiveness and relationship quality. ANCOVA analyses evaluated the effects of individual and dyadic marijuana use while controlling for participant conflict severity rating as well as antisocial behavior, alcohol dependence, age, and previous IPA perpetration by both partners.

Results

Preliminary Analyses

Males were, on average, slightly older than females (M = 32.8, SD = 6.7; M = 31.6, SD = 6.6, respectively). Few participants self-reported minority status (6%) and most couples were married (69%). Marijuana use over the past year was reported by a subset of male (34%; M = 6.6 times in the past 90 days, SD = 12.4 times, Median = 2 times) and female (23%; M = 5.7 times, SD = 9.9 times, Median = 1 time) participants. Most couples reported concordant marijuana abstinence (n = 91) with fewer reporting concordant (n = 26), discordant male only (n = 24), and discordant female only (n = 8) use. Demographic and relationship functioning data are presented in Table 1.

Self-Report Data

Control variables—Actor marijuana use was significantly and positively associated with antisocial behavior ($b = 0.11$, $SE = .03$, $p < .01$) and alcohol dependence scores ($b = 0.80$, $SE = .39$, $p = .04$). Actor marijuana use was negatively associated with age ($b = -2.52$, $SE = .81$, $p = .01$). Individual and dyadic marijuana use were not associated with ratings of past-year IPA perpetration. These variables, as well as couple-level ratings of conflict severity, were controlled in subsequent analyses. No significant actor X partner marijuana use interactions were detected in analyses predicting control variables.

Satisfaction—Results from the APIM analysis for relationship satisfaction, as reported on baseline questionnaires, revealed a significant actor X partner marijuana use interaction ($b = 10.68$, $SE = 4.39$, $p = .02$). Further examination of the interaction using simple slopes

analysis (Aiken & West, 1991) revealed that actor marijuana use was associated with lower satisfaction among actors with partners who did not use ($b = -4.84$, $SE = 2.41$, $p = .046$) and marginally greater satisfaction among actors with partners who did use ($b = 5.84$, $SE = 3.06$, $p = .06$) marijuana. Partner marijuana use was similarly associated with greater satisfaction among actors who did use ($b = 7.67$, $SE = 2.96$, $p = .01$) but not among actors who did not use ($b = -3.01$, $SE = 2.46$, $p = .22$) marijuana. This relationship is depicted in Figure 1.

Anger Experience—Participants self-reported on their anger experience immediately after completing the first interaction. A significant actor X partner marijuana use interaction emerged ($b = -.30$, $SE = .12$, $p = .02$). Specifically, actor marijuana use was associated with less anger among actors with partners who did use marijuana ($b = -.21$, $SE = .09$, $p = .01$) but not among actors with partners who did not use marijuana ($b = .08$, $SE = .07$, $p = .28$). Partner marijuana use was associated with less anger among actors who did use ($b = -.18$, $SE = .09$, $p = .04$) but not among actors who did not use ($b = .12$, $SE = .07$, $p = .10$) marijuana. Self-reported anger experience and observed anger expression interactions are displayed in Figure 2.

Observed Data

Anger Expression—A similar actor X partner marijuana use interaction ($b = -.62$, $SE = .22$, $p = .01$) emerged in the APIM analysis modeling anger expression during the interaction as observed by naïve coders. Examination of this interaction revealed that actor marijuana use was associated with less perceived anger among actors with partners who did use marijuana ($b = -.42$, $SE = .16$, $p = .01$) but not among actors with partners who did not use marijuana ($b = .20$, $SE = .12$, $p = .09$). Similarly, partner marijuana use was associated with less anger among actors who did use ($b = -.35$, $SE = .15$, $p = .02$) and greater anger among actors who did not use ($b = .27$, $SE = .13$, $p = .03$) marijuana.

Demand and Withdrawal—An actor X partner marijuana use interaction was detected in the final APIM analysis modeling interactive demand and withdrawal behavior ($b = -.25$, $SE = .13$, $p = .05$). Exploration of this interaction revealed that actor marijuana use was associated with less demand/withdrawal among actors with partners who used ($b = -.20$, $SE = .10$, $p = .04$) but not among actors with partners who did not use ($b = .05$, $SE = .08$, $p = .56$) marijuana. Partner marijuana use was associated with trend toward greater demand/withdrawal among actors who did not use marijuana ($b = .15$, $SE = .08$, $p = .07$) but not among actors who did use marijuana (b = −.10, SE = .09, p = .27) as see in Figure 3.

Constructiveness—The remaining analyses involved outcomes assessed at the level of the couple rather than the individual, and were conducted using univariate ANCOVA. After controlling for antisocial behavior, alcohol dependence, conflict severity, age, and IPV perpetration, significant main effects of male ($F_{1,134} = 6.86$, $p = .01$), female ($F_{1,134} = 5.13$, $p = .03$), and the dyadic interaction of ($F_{1,134} = 4.91$, $p = .03$) marijuana use on constructiveness during conflict were detected. Follow-up Tukey analyses revealed that significantly less constructiveness was observed among couples in which the female partner used and the male partner did not (M = 5.72, SD = 1.44) relative to all other dyadic marijuana use configurations, including concordant abstinence (M = 7.12, SD = 1.25),

concordant use (M = 7.07, SD = 1.18), and discordant male only use (M = 7.22, SD = 1.12). The other groups evidenced comparable constructiveness.

Relationship Quality—Naïve coders also estimated overall relationship quality after viewing each conflict interaction. Results indicated that a significant main effect of male marijuana use ($F_{1,134}$ = 12.51, p = .001) was qualified by the dyadic marijuana use interaction term ($F_{1,134}$ = 8.90, p = .003). Follow-up Tukey analyses again indicated that discordant relationships in which only the female partner reported marijuana use (M = 5.78, SD = 2.14) evidenced significantly lower overall quality compared to relationships with all other dyadic marijuana use patterns, including concordant abstinence (M = 7.25, SD = 1.23), concordant use (M = 7.43, SD = 1.05), and discordant male only use (M = 7.34, SD = 1.41).

Discussion

This is the first investigation to evaluate the association between concordant and discordant dyadic patterns of marijuana use and specific behaviors as well as affective experiences during episodes of relationship conflict that may generalize to the naturalistic environment and cumulatively contribute to previously observed relationship instability and maladaptive functioning among marijuana discordant couples over time (Smith et al., 2014). In support of our hypothesis, we detected a robust effect of concordant/discordant marijuana use on indicators of maladaptive relationship functioning across two methods of data collection. First, analyses revealed that concordant marijuana use was associated with greater self-reported relationship satisfaction and lower self-reported anger experience following a conflict resolution task relative to discordant use. Second, this pattern of marijuana concordant and discordant dyads was largely replicated in observations by naïve coders for anger expression as well as demand and withdrawal behavior, indicating that discordant couples not only self-reported greater anger experience but also overtly expressed greater anger during dyadic interactions. The demand and withdrawal pattern is predictive of adverse relationship outcomes, such as relationship termination and aggression, and represents a particularly maladaptive interactive style in which the male partner is typically more likely than the female partner to disengage from the conversation as a method of ending the conflict (Gottman, Coan, Carrere, & Swanson, 1998). Couple-level outcomes, including constructiveness and overall ratings of relationship quality, provided additional support for the influence of dyadic marijuana use patterns. These two analyses primarily implicated discordant, female-only marijuana use in aversive couple interactions.

Together, results provide consistent multi-method support for greater maladaptive relationship functioning during conflict among couples in which one partner, rather than neither or both, reports prior marijuana use, suggesting that the discordant subset of couples may be at heightened risk for relationship problems and the associated biopsychosocial outcomes collectively described under the marriage effect (e.g., Fleming, White, & Catalano, 2010). Thus, even in the absence of acute marijuana intoxication, we see situational differences across dyadic marijuana use configurations that may provide insight into previously observed distal associations between marijuana use and global indicators of relationship functioning.

The current results are consistent with Smith and colleagues (2014) who reported that the most maladaptive behaviors among their participants were exhibited by discordant couples, particularly those in which only the female reported frequent marijuana use on longitudinal survey measures. While evaluation of individual outcomes indicated that dyadic marijuana use patterns shared a comparable association with indicators of relationship functioning across male and female actors, we found additional evidence among couple-level outcomes to support the effects of female marijuana use on maladaptive functioning in the absence of male marijuana. Emerging evidence indicates that discordant female substance use is a greater risk factor for poor relationship functioning than male substance use (e.g., Torvik, Røysamb, Gustavson, Idstad, & Tambs, 2013). This relationship suggests that problematic use among females may be associated with greater overall deviancy or that males are less accommodating of partner impairment than females (Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991; Schoenfeld, Bredow, Huston, 2012). Further, females demonstrate greater sensitivity to, relapse potential for, and withdrawal symptoms from marijuana than males (e.g., Fattore, 2013). These risks are further compounded by evidence that female substance use is associated with greater stigma and psychological comorbidity in comparison to male substance use (for a review, see Brady & Randall, 1999). Further research is required to confirm and clarify the etiology of risks associated with dyads characterized by discordant, female-only marijuana use.

Limitations

The larger study from which data were drawn was not designed to evaluate the effects of dyadic marijuana use on relationship functioning. Our sample was selected because of their suitability for a couples' alcohol administration study and thus consisted of couples in which both partners consumed more alcohol than the typical individual in the general population while excluding couples in which one or both partners used marijuana daily. The current findings, therefore, may not generalize well to either the general population or the most severe marijuana users. This area of research would benefit from further investigation designed to evaluate the effects the frequency of dyadic marijuana use on relationship functioning among a more diverse, representative sample of marijuana users. Further, because couples were not selected on the basis of marijuana use, we had uneven distribution across dyadic marijuana groups. Most couples abstained from marijuana use and the discordant, female only marijuana group was small. The conflict resolution paradigm allows for observation of behaviors in a naturalistic setting. While superior to other aggression paradigms in terms of ecological validity (e.g., Taylor, 1967), interactions occurred outside of their natural environment. Lastly, participants were not subjected to drug testing to confirm recent use or abstinence from marijuana. It should be noted that, due to the lipid-soluble nature of marijuana, testing is imprecise and would not have reliably distinguished between same-day and prior-day use. None of the current participants reported daily use and all were asked to refrain from use for 24 hours prior to participation. Thus, behaviors were measured in the presumed absence of acute marijuana use and do not represent pharmacological effects.

Conclusions

The current study provides additional support for the distal relationship between self-reported dyadic marijuana use and relationship satisfaction while extending the concordant/discordant pattern to situational affective and behavioral responses observed in a laboratory setting. Concordant marijuana use was associated with less conflictual interpersonal interactions than discordant use in the absence of acute intoxication, indicating that marijuana use per se does not invariably result in aversive dyadic interactions. Discordant use, however, was associated with maladaptive conflict behaviors across observed and self-reported indicators. It should also be noted that marijuana use, like most behaviors, is subject to change over the course of a relationship. Future research is required to determine if periods of transition from a marijuana use concordant dyad to a discordant dyad, such as behavior changes resulting from mandatory drug treatment and testing or voluntary abstinence due to maturation or pregnancy, may be associated with increased individual and relationship distress.

Acknowledgments

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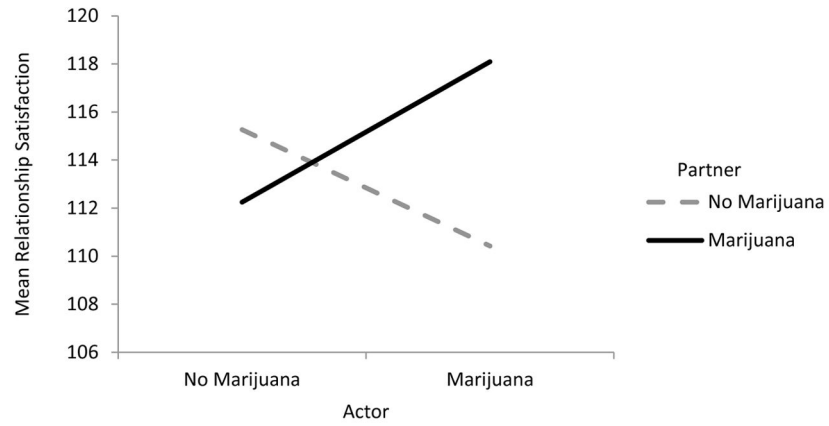
Figure 1. Actor and partner marijuana use predicting relationship satisfaction
Note: Actor and partner marijuana use were dichotomous variables representing either no use or use over the year prior to the laboratory procedure.
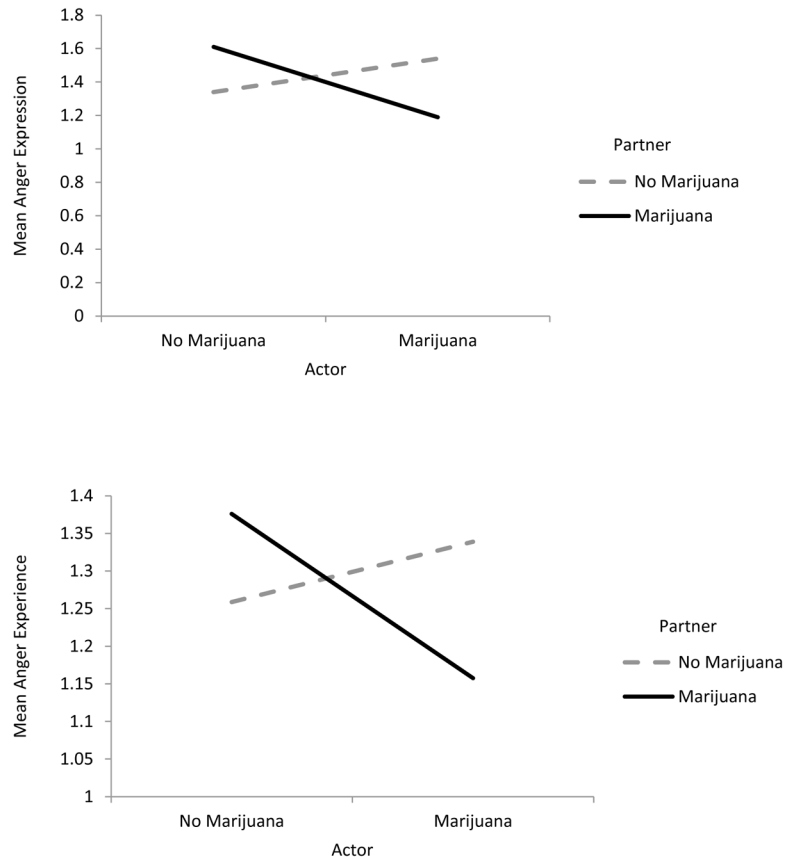
Figure 2. Actor and Partner marijuana use predicting naïve ratings of actor anger expression (Top Panel) and post-interaction self-reported actor anger experience (Bottom Panel)
Note: Actor and partner marijuana use were dichotomous variables representing either no use or use over the year prior to the laboratory procedure.

Figure 3. Actor and partner marijuana use predicting Demand and withdrawal behaviors during conflict

Note: Actor and partner marijuana use were dichotomous variables representing either no use or use over the year prior to the laboratory procedure.
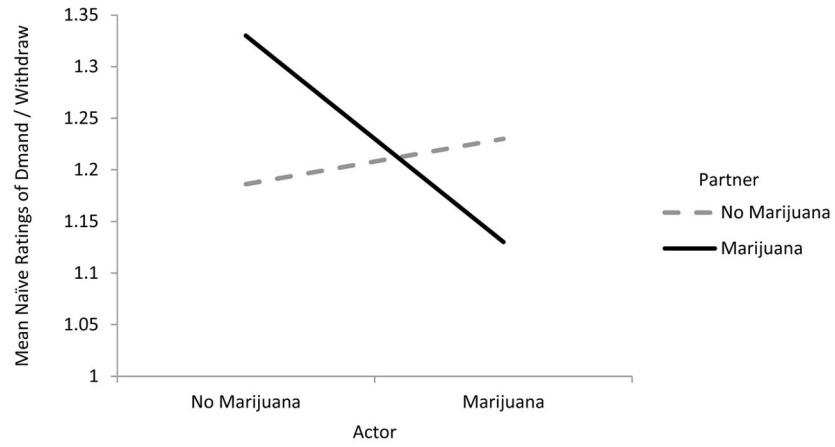
Table 1

Descriptive data for demographic and relationship functioning variables across males, females, and couples.

	Males			Females			Couples	
	M	SD	%	M	SD	%	M	SD
Self-Report								
Antisocial Behavior	1.43	0.26		1.32	0.21			
Alcohol Dependence	9.01	2.65		8.85	2.56			
Satisfaction	115.16	11.94		114.78	13.33			
Anger Experience	1.24	0.40		1.28	0.39			
Previous IPV Perpetration			43.0			46.3		
Marijuana Use			33.6			22.8		
Observational								
Demand/Withdrawal	1.13	0.38		1.27	0.45			
Anger Expression	1.30	0.60		1.44	0.77			
Constructiveness							7.05	1.26
Relationship Quality							7.23	1.31