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# Risk Factors for Intimate Partner Violence During Pregnancy and Postpartum

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#### **Abstract**

**Purpose**—This longitudinal investigation examined potential risk factors for intimate partner violence (IPV) among women during pregnancy and 6 weeks postpartum.

**Methods**—A sample of 180 pregnant women was collected in order to investigate 1) whether associations between partner alcohol misuse, partner jealousy, partner suspicion of infidelity, and stress were associated with IPV victimization, 2) the indirect effects of alcohol misuse on these relationships, and 3) factors related to changes in IPV victimization over time.

**Results**—At baseline, partner alcohol misuse was associated with each type of IPV victimization and the combination of partner alcohol misuse, partner jealousy, and partner suspicion of infidelity was most strongly associated with severe physical victimization. Partner alcohol misuse mediated the relationship between partner jealousy and psychological and severe physical victimization. At follow-up, partner jealousy and stress were related to women's psychological victimization and partner alcohol misuse was related to women's severe physical victimization.

**Conclusions**—Findings suggest that partner alcohol misuse is a risk factor for women's IPV victimization during pregnancy and jealousy and stress may increase risk for some types of IPV. Findings also suggest that intervention should target parents early in pregnancy in order to reduce the risk for future IPV.

#### Keywords

intimate partner violence; pregnancy; alcohol misuse

Research has identified alarmingly high prevalence rates of IPV victimization in expectant women ranging up to fifty percent (Bailey, 2010; Bailey & Daugherty, 2007; Gazmararian et al., 1996; Sonis & Langer, 2008; Taillieu & Brownridge). While these findings are comparable to prevalence rates documented in other U.S. populations such as newlyweds,

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women with mental health problems, and treatment seeking samples (Breiding, Black, & Ryan, 2008; Golding, 1999; Hellmuth & McNulty, 2008; Weinsheimer, Schermer, Malcoe, Balduf, & Bloomfield, 2005), and comparable to lifetime prevalence rates among community women (Breiding et al., 2008; Thompson et al., 2006), they are higher than that documented among some larger population-based samples (Tjaden & Thonnes, 2000). Research indicates that pregnant women who are exposed to IPV are at heightened risk for serious physical, behavioral, and psychological problems including miscarriage, substance use, smoking, depression, and PTSD (Bailey & Daugherty, 2007; Flynn & Chermack, 2008; Goedhart, van der Wal, Cuijpers, & Bonsel, 2009; Morland, Leskin, Block, Campbell, & Friedman, 2008; Rosen, Seng, Tolman, & Mallinger, 2007). IPV perpetrated against pregnant women has an especially malignant impact due to the fact that pregnant IPV victims are also twice as likely to forgo prenatal care compared to pregnant women who are not experiencing IPV (Chambliss, 2008). Therefore, determining the factors that contribute to risk for IPV in this population is essential to inform screening and intervention efforts aimed at mitigating IPV and its negative health consequences (Zink, Elder, Jacobson, & Klostermann, 2004).

The literature documenting the course of IPV around the time of pregnancy and risk factors for victimization is scant. Past studies have focused on cross-sectional designs and demographic risk factors with few exceptions (Kiely, El-Mohandes, El-Khorazaty, Blake, & Gantz, 2010; Silverman, Decker, Reed, & Raj, 2006; Sonis & Langer, 2008). Furthermore, most investigations have examined IPV exposure as one construct despite findings indicating differential etiologies and occurrence of IPV by severity and type (Bell & Naugle, 2008; Kelly & Johnson, 2008). The present study addresses these gaps in the literature by utilizing a longitudinal design consisting of two time points, investigating three distinct types of IPV victimization, and investigating psychosocial factors (i.e., stress, jealousy, suspicion of infidelity, and alcohol misuse) as they relate to IPV victimization.

#### **Stress**

Many studies have observed an increase in stress during pregnancy (Doss, Rhoades, Stanley, & Markman, 2009; Lawrence, Rothman, Cobb, Rothman, & Bradbury, 2008; Mitnick, Heyman, & Smith Slep, 2009). Factors such as low socioeconomic status (SES) may also exacerbate stress, especially during pregnancy (Doss et al., 2009). Under stress, both dyadic and individual coping skills tend to decrease, leading to an increased risk for verbal and physical aggression (Bodenmann, Meuwly, Bradbury, Gmelch, & Ledermann, 2010; Hellmuth & McNulty, 2008). Whereas most expectant couples may be able to cope with the stress that commonly arises during this time without using violence, low SES pregnant women may be particularly vulnerable to IPV victimization as a result of the being exposed to the confluence of these factors (Curry, 1998; Kaslow & Thompson, 2008).

### Jealousy and Suspicion of Infidelity

Research suggests that individuals may be more prone to violent behavior in the presence of jealousy or suspicion of infidelity, especially during pregnancy (Gangestad, Thornhill, & Garver, 2002; Gelles, 2001; Goetz & Shackelford, 2009; Harris, 2003). Consistent with research indicating the important role of these factors in IPV (Dutton, 2010; Foran & O'Leary, 2008), we expected that these variables would be associated with risk for IPV victimization in this sample.

## Alcohol Misuse and its Potential Mediating Role

Despite the abundance of literature documenting a strong relationship between partner alcohol use and women's IPV victimization in other populations (Foran & O'Leary, 2008;

Stuart et al., 2006; Temple, Weston, Stuart, & Marshall, 2008), only three studies examining expectant women have included partner alcohol use in their study designs (Amaro, Fried, Cabral, & Zuckerman, 1990; Hedin & Janson, 2000; Muhajarine & D'Arcy, 1999). Each found that partner alcohol misuse increased women's risk for IPV victimization. It is possible that partners might cope with the challenges surrounding pregnancy such as increased stress and increased jealousy by misusing alcohol (i.e, the "drinking to cope" model)(Peirce, Frone, Russell, & Cooper, 1994; Todd, Armeli, & Tennen, 2009). In turn, alcohol misuse may prevent a person who is experiencing stress, jealousy, or suspicion of infidelity from better controlling their behavior (Clements & Schumacher, 2010). Consequently, partner alcohol misuse may not only be a salient risk factor for women's IPV victimization in this study, but it may also account for the relationships between partner jealousy, partner suspicion of infidelity, and stress and IPV.

#### **Hypotheses**

We hypothesized that higher levels of partner alcohol misuse, women's stress, partner jealousy, and partner suspicion of infidelity would be associated with greater frequency and severity of women's IPV victimization during pregnancy and 6 weeks postpartum. We also expected that partner alcohol misuse would mediate the associations between women's stress, partner jealousy, partner suspicion of infidelity, and women's IPV victimization during pregnancy.

#### **Methods**

#### **Study Participants**

A sample of 180 women in their first eighteen weeks of pregnancy was recruited from two university affiliated health clinics. All study participants spoke and read English, were at least 18 years of age, and had contact with either their intimate partner or child's father at least once per month. If a woman was not in an intimate relationship, she referred to her child's father when responding to questionnaires. If a woman had no relationship partner and no contact with their child's father, she was considered ineligible for participation. The follow-up assessment was identical to that administered at baseline. One hundred twenty two women completed follow-up assessments.

#### **Recruitment and Assessment Procedures**

Members of the primary care team assisted in recruitment. A nurse briefly explained the nature of the study and, if the patient was interested, asked if a female member of the research team could enter the exam room in order to explain further. The research assistant explained that the purpose of this study was to better understand the health and wellbeing of pregnant women. Those who met eligibility criteria and were interested in participation were asked to read and sign the consent form after having the scope of confidentiality of the study explained and asking any questions they had. Participants completed their questionnaires in the privacy of their exam room while waiting for their physician to arrive. Participants earned a twenty-five dollar gift certificate as reimbursement at each time point. All procedures were approved by the IRBs of the investigators' home institution and the recruitment sites.

#### **Materials**

Women's Intimate Partner Violence Victimization—The Revised Conflict Tactics Scale (CTS-2) (Straus, Hamby, Boney-McCoy, & Sugarman, 1996; Straus, Hamby, & Warren, 2003) is based on the original Conflict Tactics Scale (CTS)(Straus, 1979) and is the most widely used scale for assessing partner violence (Straus et al., 1996). The 78-item

CTS-2 measures the behavior of both the respondent and the respondent's partner. For the purposes of this investigation, only the psychological and mild and severe physical aggression subscales were utilized. Participants were asked to select one frequency response for each item. The frequency of each of the behaviors during that time period are recoded such that the midpoint of each range is the score value (never=0, once=1, twice=2, 3-5 times=4, 6-10 times=8, 11-20 times=15, more than 20 times=25). These values are then summed to obtain a total score (Straus et al., 2003). At baseline, participants were asked to respond to the CTS-2 according to the time since her pregnancy began. At follow-up, she was asked to respond according to the time period since her baseline assessment. Women's psychological IPV victimization was the sum of the 8 items indicating psychological IPV victimization (i.e. being yelled at or called names by ones partner), minor physical victimization was the sum of 5 items indicating minor physical IPV victimization (i.e. being pushed, being slapped), and severe physical victimization was the sum of the 7 items indicating severe physical victimization (i.e. being kicked, beaten up, or having a weapon used against you). The Cronbach's alpha for the CTS-2 total physical IPV victimization scale was .92 in this sample.

Partner Alcohol Misuse—The Alcohol Use Disorders Identification Test-Partner (AUDIT-P)(Stuart, Moore, Kahler, & Ramsey, 2003; Stuart, Moore, Ramsey, & Kahler, 2003) is a 10-item self-report instrument used to screen for partner drinking problems. This measure was adapted from the original AUDIT (Saunders, Aasland, Babor, de la Fuente, & Grant, 1993). The AUDIT-P was modified for the current study to assess partner alcohol misuse in the past 6 months whereas the original measure examines the past year. The AUDIT-P assesses 1) quantity and frequency of partner drinking, 2) indicators of physiological dependence, 3) negative psychological reactions and psychological dependence symptoms, and 4) alcohol related problems that the partner has encountered. Each item is scored from 0–4, and total scores range from 0–40 with higher scores indicative of greater alcohol misuse severity. Those who score an 8 or higher are considered to be indicative of hazardous drinking. In this sample, the Cronbach's alpha for the AUDIT-P was .85.

**Partner Jealousy**—The Interpersonal Jealousy Scale (IJS)(Mathes & Severa, 1981) is a 54-item self-report questionnaire designed to assess jealousy in various situations involving one's partner. Each question is rated on a 9-point scale, ranging from 1 (absolutely true) to 9 (absolutely false). Higher scores are indicative of higher levels of jealousy. For this study, the scale was modified to assess the participant's perceptions of her partner's levels of interpersonal jealousy. In this sample, the Cronbach's alpha was .93.

Partner Suspicion of Infidelity—Partners' suspicion of infidelity was assessed with the Events With Others scale (EOS)(Buss & Shackelford, 1997) is a 12-item self-report questionnaire in which the participant estimates the likelihood (on an 11-point scale ranging from 0% to 100%) of their partner engaging in various types of infidelity in the upcoming year. This scale was modified to address men's suspicion of infidelity. Participants were asked to rate their partners' belief that the participant would engage in extradyadic behaviors such as flirting, kissing, going on a date, having a one night stand, or having an affair with another partner. The Cronbach's alpha for this scale in the present study was .76.

**Stress**—The Perceived Stress Scale (PSS)(Cohen, Kamarck, & Mermelstein, 1983) is a 14-item self-report questionnaire used to assess global life stress. The PSS is commonly used in pregnancy research and studies of low SES individuals (Rodriguez et al., 2008; Sagrestano, Carroll, Rodriguez, & Nuwayhid, 2004). Each item is scored on a scale from 0 to 4 with

higher scores indicative of higher perceived stress. This measure demonstrated strong reliability in the present study with a Cronbach's alpha = .76.

#### **Data Analysis**

All dependent variables were dichotomized (*0=IPV did not occur*; *1=IPV did occur*). Logistic regression was employed to determine the extent to which each of the independent variables contributed to the risk IPV of victimization in an additive model. Three logistic regression models were tested at each time point; one model for each dependent variable. Mediation analyses were conducted consistent with the product of coefficients procedure outlined by McKinnon and colleagues (MacKinnon, Fritz, Williams, & Lockwood, 2007; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). All analyses at follow-up controlled for women's IPV victimization at baseline.

#### Results

#### **Sample Description and Preliminary Analyses**

Most participants (79%) were Caucasian, Christian (81%), reported a household income of less than \$50,000 yearly (87%), and had attained between 11 and 13 years of education (80%). Approximately 64% of participants reported that they were currently in a dating relationship, 23% reported that they were married, 4% reported that they were divorced, and 7% reported that they were not currently in a romantic relationship. Participant reports of the duration of their relationships ranged from one month to 21 years. The mean relationship length was 34.6 months. On average, women in this sample had a mean of 1.2 children already living in their household including biological offspring, stepchildren, or adopted children. One way analysis of variance (ANOVA) revealed that relationship length was the only variable that delineated those who completed follow-up from those who did not; those who completed follow-up had a mean relationship length of 40 months and those who did not complete follow-up had a mean relationship length of 24 months. All other demographic and key variables including age, ethnicity, income, education, relationship status, stress, depression, own and partner alcohol misuse, and each type of IPV were examined to better explain this high rate of attrition but no differences emerged.

Prevalence and frequency of IPV at baseline and follow-up can be found in Table 1. Prevalence of victimization was congruent with findings from some of the existing literature, but lower than some recent studies (Bailey & Daugherty, 2007). Participants reported mean stress scores of 21.89 (SD=6.49) and 19.81 (SD=7.05) at baseline and follow-up, which are congruent with community samples collected with this measure, but higher than expected based on the literature describing low SES pregnant women. Women reported that on average, their partners were misusing alcohol at moderate to high levels with mean scores of 11.91 (SD=5.89) at baseline and 9.77 (SD=6.51) at follow-up. Participants reported mean partner jealousy scores of 135.05 (SD=31.60) at baseline and 136.80 (SD=22.23) at follow-up out of a total possible 243, indicating moderate to high levels of jealousy. Finally, women reported that their partners had very low suspicion of infidelity at baseline with a mean score of 2.01 (SD=1.44), but this score rose over time to a mean of 8.63 (SD=6.88).

# Are partner alcohol use, stress, partner suspicion of infidelity, and partner jealousy associated with risk for IPV?

Correlations amongst independent and dependent variables within assessment period are reported in Table 2. Between assessment period correlations are reported in Table 3. Because the correlation matrices indicated associations among independent variables, tests

of tolerance and variance inflation factor (VIF) were examined and revealed no evidence of multicollinearity among predictors.

Results of logistic regression analyses are displayed in Table 4. At baseline, partner alcohol misuse was significantly associated with each type of psychological victimization. Stress was significantly related to mild physical aggression victimization and partner jealousy and suspicion of infidelity were significantly associated with severe physical victimization. At follow-up, stress and partner jealousy were related to psychological victimization at follow up. Only partner alcohol misuse was associated with severe physical victimization at follow up.

# Does Partner Alcohol Use Mediate the Relationships between Stress, Jealousy, or Suspicion of Infidelity to Predict IPV?

Two mediation analyses emerged as significant. Consistent with expectations, partner alcohol misuse at baseline fully mediated the relationship between jealousy and women's severe physical victimization at baseline ( $\beta$ =.003, 95% CI [.0001, .007]). Partner alcohol misuse at baseline also partially mediated the relationship between men's jealousy and psychological victimization at baseline ( $\beta$ .004, 95% CI [.0007, .010]).

#### Does IPV victimization change over time?

At follow-up, twenty-seven women reported an increase in psychological victimization, 13 reported that their victimization continued at the same level, 30 reported no victimization at either time point, and 52 women reported a reduction. Eight women reported an increase in minor physical victimization, 2 reported that their victimization continued at the same level, 88 reported no victimization at either time point, and 24 women reported a reduction. Finally, just 3 women reported an increase in severe physical victimization, 2 reported that their victimization continued, 102 reported no severe victimization at either time point, and 15 women reported a reduction over time. Of the women who completed follow-up assessments and reported no IPV victimization of any type at baseline, 58 reported the initiation of psychological victimization during pregnancy, 9 reported the initiation of minor physical victimization, and 2 reported the initiation of severe physical victimization. None of the variables investigated here were significantly related to reduction or escalation of IPV victimization at follow up.

#### **Discussion**

We expected that partner alcohol misuse, stress, partner jealousy, and partner suspicion of infidelity would be associated with risk for IPV victimization for women in our sample. Our findings indicate that partner alcohol problems are related to baseline levels of psychological, minor, and severe physical victimization and to severe physical victimization at follow-up. Women's perceived stress was related to their mild physical victimization at baseline and their psychological victimization at follow-up. Partner suspicion of infidelity was related only to women's severe physical victimization at baseline. The mediating relationships that emerged at baseline indicate that jealousy is associated with risk for IPV victimization in this sample, and that for some participants, alcohol misuse and jealousy are influential factors in the occurrence of IPV during pregnancy. This finding provides modest, preliminary support for the application of affect-regulation and alcohol myopia hypotheses to research on IPV among pregnant women. Perhaps those who experience jealousy might use alcohol in order to regulate those uncomfortable emotions, which may in turn lead to behavioral disinhibition in the form of severe aggression (Clements & Schumacher, 2010; Foran & O'Leary, 2008). Alternative theoretical explanations should be explored in future research in order to better understand the etiology of IPV during pregnancy and postpartum.

One notable finding was how differently the hypothesized model explained severe physical victimization compared to more mild forms of IPV at baseline. Researchers have begun to define distinct etiologies of different types of IPV (Bell & Naugle, 2008; Holtzworth-Munroe & Stuart, 1994; Johnson, 1995; Kelly & Johnson, 2008). A similar distinction may have emerged in this investigation. Perhaps there exists a smaller subset of couples who are more prone to severe aggression in these circumstances (Burch & Gallup Jr, 2004). While the present study did not assess motivations for IPV or typologies of IPV and thus cannot speak to the specific types of IPV experienced by our participants, the severity of IPV victimization most commonly reported by our participants may reflect "situational" or "common couple violence" (Johnson, 1995) as opposed to more severe types of IPV that often reflect dominance and control. Future studies should include this information in their assessments. Doing so will allow researchers to accurately test and compare the effects of different types of IPV victimization among pregnant and postpartum women. Delineating these groups through means of screening may assist medical personnel in conducting more informed intervention and making mental health referrals when appropriate.

These results highlight the importance of separating types of IPV in investigations of pregnant women and reporting the frequency of these events in future studies. Without this depth of analysis, which is difficult to conduct with larger sample sizes, one might erroneously conclude that IPV during pregnancy and shortly after childbirth is minimally problematic for women in this population. Few women in this sample reported minor or severe physical IPV victimization during pregnancy and postpartum, resulting in low mean CTS-2 scores at both time points. However, our data indicate that those women who reported physical IPV victimization also reported experiencing these events many times, resulting in a large range of CTS-2 subscale scores. These data suggest that in this sample, if a woman is experiencing physical IPV at all, they are experiencing it frequently, which may put them at great risk for physical and psychological harm. As a result of the multitude of demands placed on medical providers, IPV screenings in medical settings are sometimes conducted in a perfunctory or rushed manner (Jack, Jamieson, Wathen, & MacMillan, 2008; Kulkarni, Lewis, & Rhodes, 2011) which may contribute to the inefficacy of screening efforts described by some studies (MacMillan et al., 2009). Furthermore, pregnant women who experience IPV report feeling reluctant to disclose their victimization to providers, (Edin, Dahlgren, Lalos, & Hogberg, 2010) and those who find their disclosures unhelpful may to suffer distress as a result (Liebschutz, Battaglia, Finley, & Averbuch, 2008). Therefore, these results suggest that the safety and health of women may be enhanced by developing skillful and informed interventions by medical providers.

These findings also indicate that while many women in this sample experienced a reduction in IPV victimization from pregnancy to postpartum, a smaller subset experienced an increase in IPV victimization. However, the variables in this study did not sufficiently explain these changes for the women who completed follow-up. Future studies might benefit from examining other constructs that might improve our understanding of the trajectories of IPV during this time of transition so as to inform prevention and intervention efforts.

#### Limitations

This study's findings should be interpreted in the context of several limitations. The absence of corroborating partner data in this study is a limitation that makes it impossible to verify the accuracy of women's reports of sensitive topics that may be prone to underreporting. The absence of these data also may contribute to shared method variance, which may have inflated some of the associations found in this study. It also limits the extent to which we can contextualize the occurrence of women's victimization since we cannot examine our findings in a dyadic context. Our findings regarding the changes in IPV victimization from baseline to follow-up are limited by the difference in referent time periods for each

assessment. Future studies would be better able to accurately contrast the frequency and severity of IPV victimization with more similar assessment time frames. Our study also did not include analyses investigating factors related to sexual IPV victimization, which frequently co-occurs with psychological and physical IPV and is highly relevant to the health and wellbeing of women across populations (Bonomi, 2007; Sullivan, 2012). The literature on IPV among pregnant and postpartum women would be improved with investigations elucidating factors related to the occurrence and effects of sexual IPV specific to this population. Limited resources did not allow for such data to be collected. Future research should aim to include partner reports, control for the amount of time partners spend together, and assess the temporal relationship between acute alcohol intoxication and aggressive behaviors. The applicability of these findings is also limited by the high attrition rate and subsequent limited statistical power in evaluating the relationships explored in this study. Future research on this topic should include brief assessments of factors at baseline that may influence women's willingness or ability to complete follow-up assessments. Generalizability of findings also may be limited to women who are consumers of prenatal care since research indicates that many women who experience IPV during pregnancy decline or delay prenatal care (Chambliss, 2008). Additional assessments throughout pregnancy and after childbirth may provide a clearer description of women's IPV experiences. This study did not assess protective factors or service utilization, including informal interventions that may have been made by medical staff, which may contribute to the overall reductions in IPV in this sample.

#### Conclusions

This study's findings underscore the risk of IPV victimization posed to pregnant women as a result of partner alcohol misuse and introduces partner jealousy, suspicion of infidelity, and stress as contributing factors to IPV victimization in this population. Our findings suggest that early screening and intervention are crucial for pregnant women and may help health care providers become more equipped to assess risk or identify appropriate intervention time points for women and couples during pregnancy and postpartum, as alcohol misuse is not currently included in interventions for parents (Pinquart & Teubert, 2010). Findings also suggest that types of violence might have distinct origins, which may aid medical personnel in continuing to monitor IPV in pre- and postnatal visits.

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Table 1

Descriptive Statistics of Study Variables at Baseline and Follow-up.

		Baseline (n=180)			Follow-up (n=122)	
	Prevalence	Prevalence Observed Range	Mean (SD)	Prevalence	Mean (SD) Prevalence Observed Range	Mean (SD)
IPV Victimization						
Psychological	67.7	0-104	17.64 (23.26)	54.1	0-107	15.98 (21.44)
Minor Physical	31.3	0-40	1.86 (6.48)	10.7	0–29	1.68 (5.75)
Severe Physical	8.3	0-47	0.89 (4.85)	4.1	0–28	1.00 (4.75)
Partner Alcohol Misuse	ı	0–27	3.68(5.34)	ŀ	0–27	2.65(5.14)
Partner Jealousy	ı	27–225	135.05(31.60)	;	33–188	136.97(23.09)
Partner Suspicion of Infidelity	ı	0-50	10.03(7.22)	1	0-41	8.66(6.65)
Stress	ı	3–37	21.89(6.49)	1	0-41	19.81(7.05)

partner alcohol misuse, jealousy, suspicion of infidelity, and stress variables reflect scores for the total sample. Means, standard deviations, and range values for IPV variables reflect CTS-2 subscale scores Note. Prevalence reported reflects the percentage of women in this sample who experienced at least one incident of each type of IPV in the total sample. Means, standard deviations, and range values for for only those women who reported any type of IPV victimization at baseline (n=122) and follow-up (n=66). Hellmuth et al.

Bivariate Correlations Among Independent and Dependent Variables at Baseline and Follow-up.

	1.	2.	3.	4.	5.	6.	7.
1. Psychological Vicitmization	1	.32 **	.21 **	.26**	.21 **	.07	.22 **
2. Minor Physical Victimization	.55	ı	.62 **	.25 **	.16*	.25 **	.28 **
3. Severe Physical Victimization	.35 **	.78**		.20**	.20**	.31 **	.14
4. Partner Alcohol Misuse	.17	.25 **	.46 **	ı	.26 **	03	.21 **
5. Partner Jealousy	.21*	80.	.02	.02	1	.17*	.24 **
6. Partner Suspicion of Infidelity	*61.	02	07	.07	.15	ı	.18**
7. Stress	.34 **	.07	.02	.14	.18	.17	

Note. Correlations were calculated using a Pearson's r. P-values are based on a two-tailed test of significance. Values above the diagonal represent baseline correlations while those below the diagonal represent follow-up correlations. Baseline n=180. Follow-up n=122.

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\* Indicates *p*-value <.05, \*\* indicates p-value <.01.

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Table 3

Bivariate Correlations between Baseline and Follow-up Independent and Dependent Variables.

	1.	2.	3.	4	5.	.9	7.
1. Psychological Vicitmization	.51	.25 **	.15*	*61.	.20**	.17	.20*
2. Minor Physical Victimization	.17	.20*	.24**	.15	01	.02	.13
3. Severe Physical Victimization	.12	* 42:	.35 **	.21*	80.	.19*	.12
4. Partner Alcohol Misuse	* 42:	41.	.25 **	.64	11.	.01	.03
5. Partner Jealousy	*61.	.16	80.	.13	** 09°	.05	.14
6. Partner Suspicion of Infidelity	01	.18	.05	03	11.	.22*	* 42:
7. Stress	.25 **	.18	.11	.19*	.14	.12	.33 **

Note. Variables on the vertical axis represent baseline variables and those on the horizontal axis represent follow up variables. Correlations were calculated using a Pearson's r. P-values are based on a two-tailed test of significance. Baseline n=180. Follow up n=122.

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 $^*$  Indicates p-value <.05,

\*\* indicates p-value <.01.

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I able 4
Results of Logistic Regression on IPV Victimization at Baseline and Follow-up.

	Psy	Psychological IPV	) N	Min	Minor Physical IPV	ΡV	Seve	Severe Physical IPV	ΙΔ
Variable	O.R.	95% CI	ď	O.R.	95% CI	ď	O.R.	12 %56	Ь
Baseline									
Partner Alcohol Misuse	1.07	1.07 1.02–1.12	<.01	1.06	1.02-1.10	<.01	1.06	1.01-1.11	.01
Partner Jealousy	1.01	.99–1.02	.07	1.01	.99–1.03	.32	1.03	1.00 - 1.10	90.
Partner Suspicion of Infidelity	1.00	.96–1.06	62.	1.06	.99–1.13	60:	1.09	1.01 - 1.17	.03
Stress	1.05	.99–1.11	.08	1.14	1.01-1.27	.03	66:	.88–1.12	.91
Follow-Up									
Partner Alcohol Misuse	1.03	.98–1.08	.24	1.04	.99–1.09	.11	1.11	1.11 1.03–1.19	<.01
Partner Jealousy	1.02	1.00 - 1.04	90.	1.00	.97–1.03	88.	1.01	.95–1.09	.71
Partner Suspicion of Infidelity	1.00	.93–1.07	.94	1.08	.99–1.17	.07	1.06	.91–1.23	.46
Stress	1.08	1.01 - 1.15	.03	1.03	.95–1.13	.48	66:	.84–1.17	.91
Baseline Victimization	1.02	1.00 - 1.05	60:	1.06	.99–1.14	60.	1.10	.99–1.21	80.
								ı	

Note. Baseline N= 180, follow-up N=122.

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