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Stability of Intimate Partner Violence by Men across 12 Years in Young Adulthood: Effects of Relationship Transitions

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Abstract

The present study examined the stability of young men's intimate partner violence (IPV) over a 12-year period as a function of relationship continuity or discontinuity. Multiwave measures of IPV (physical and psychological aggression) were obtained from 184 men at risk for delinquency and their women partners. The effects of relationship continuity versus transitions on change in IPV were examined using multilevel analyses. In general, men's IPV decreased over time. Men's physical aggression in their early 20s predicted levels of physical aggression about 7 years later, and men's psychological aggression in their early 20s predicted levels of psychological aggression about 10-12 years later. As hypothesized, higher stability in IPV was found for men who stayed with the same partners, whereas men experiencing relationship transitions showed greater change. The IPV of new partners was linked to the changes in men's IPV that occurred with repartnering. There was less change in men's IPV over time as men changed partners less frequently.

Keywords

at-risk populations; couples; domestic violence; intimate partner violence; partner abuse

Intimate partner violence (IPV) is a complex and serious public health problem with physical and mental health consequences for couples and their families (e.g., Breiding, Black, & Ryan, 2008). Intervention practices focused only on men's aggression and characteristics have been found to be largely ineffective in reducing IPV (Babcock, Green, & Robie, 2004), making it a research priority to increase understanding of IPV and to develop evidence-based approaches to prevent and treat this aggressive behavior (Dutton & Corvo, 2006). In particular, identifying factors and processes that increase either the risk for onset or continuity of IPV is essential to effective preventive interventions for IPV. Thus far, most research on IPV has focused on aggression within a single romantic relationship, with very few studies examining IPV across sequential relationships (e.g., men with two or more women partners) over time. Yet, such work can provide important insight into intraindividual stability and variability in IPV and also into partner influences. The absence of this work is notable because IPV is associated with likelihood of relationship transitions (e.g., Lawrence & Bradbury, 2001; Shortt, Capaldi, Kim, & Owen, 2006).

The present study focuses on whether young men's IPV levels remained stable or changed as a function of romantic relationship transitions (moving from one romantic relationship to another) and new partners levels of IPV compared with those of prior partners' in the

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Oregon Youth Study (OYS) sample of young couples (OYS-Couples Study). Fritz and O'Leary (2004) and Kim, Laurent, Capaldi, and Feingold (2008) show that IPV peaks in young adulthood and then declines with age, in terms of the overall prevalence and level of IPV when the same individuals were followed longitudinally. It is important from both a prevention and treatment perspective to understand the stability of men's IPV. With higher stability, there is an increased probability that most men who are arrested for IPV will be repeat offenders, but lower stability would indicate a reduced probability of reoffending and likely more opportunity to influence IPV levels through prevention and treatment efforts aimed at both couples and individuals.

A change in partner appears to be an important factor in variability in IPV trajectories. Previous work with the present sample over 2.5 years indicated that the young men in their early 20s were aggressive toward their partners in some relationships but not in other relationships, and that fluctuations in levels of IPV (both physical and psychological) were linked to transitions to new partners (Capaldi, Shortt, & Crosby, 2003). In a dating sample of adolescent couples, higher rates of IPV stability were found for continuing relationships over a 1-year period (Fritz & Slep, 2009). The stability of IPV over relatively short periods (1 or 2 years) for continuing relationships versus new relationships in these two studies suggests that dyadic interactional influences and partner behaviors play an influential role in the occurrence of IPV.

Stability and change as a function of relationship continuity or discontinuity can be understood within a dynamic developmental systems perspective in which IPV is conceptualized as an interactional pattern within the dyad that is responsive both to the developmental characteristics and behaviors of each partner, as well as to proximal contextual factors (Capaldi, Kim, & Shortt, 2004; Capaldi, Shortt, & Kim, 2005). A key process in the development of IPV, as suggested by coercion theory (e.g., Patterson, 1982), is that romantic partners' behaviors are likely to evoke predictable responses from each other that, in turn, can reinforce the interactional patterns that emerge. Within this framework, IPV is more likely to be stable for couples for whom interactional patterns have been established and environmental contingencies remain stable. Thus, less stability (i.e., change) in IPV would be expected with repartnering because the characteristics and behaviors of a new partner will differ from those of the prior partner, and the new couple would then create new interactional patterns and environmental contingencies. On the other hand, it is possible that there is some continuity in IPV from one relationship to the next because of partner selection and assortative partnering. That is, individuals tend to select partners who are similar to themselves on many risk characteristics, including levels of antisocial behavior, which is predictive of IPV (e.g., Kim & Capaldi, 2004).

Consistent with a developmental systems perspective, IPV in relationships characterized by greater assortative partnering on risk characteristics are less likely to change because the similarities between partners create an environment that reinforces behaviors and interactional patterns. The conceptualization of partner behaviors as environmental influences on IPV is supported by emerging evidence on partner effects. Partners' IPV (physical and verbal aggression) was a strong predictor of whether individuals were aggressive toward spouses in newlywed couples (Schumacher & Leonard, 2005). In a study of couples with young children, men cited women's physical aggression as a proximal precipitant for their own physical aggression, whereas women cited men's verbal aggression as a precipitant for their own physical aggression (O'Leary & Slep, 2006). In the present sample, women's antisocial behavior has been found to be associated with increases in men's physical aggression over time, and also with increases in men's psychological aggression when men had relatively low levels of antisocial behavior. In addition, women's depressive symptoms predicted increases in men's physical and psychological aggression

over time (Kim et al., 2008). The present study extends that prior study by examining the association of women's IPV with men's IPV over time both within and across romantic relationships.

The relationship context that can be observed with a new versus continuing romantic partner sets up a natural experiment in which to examine stability and change in IPV. As previously reviewed, there is little evidence available on IPV across romantic relationships and partner influences. This study builds on previous work to examine (a) whether intraindividual variability in IPV is different for individuals that stay with the same partner compared with individuals who change partners over time and (b) the influence of different partners and their levels of IPV on intraindividual variability in IPV. IPV in relationships involves both physical and psychological aggression. Psychological aggression has a higher prevalence than physical aggression, may have a severe impact (e.g., Lawrence, Yoon, Langer, & Ro, 2009; O'Leary, 2001), and has been identified as a correlate and predictor of physical aggression (e.g., Capaldi, Kim, & Shortt, 2007). Therefore, this study considers both types of aggression separately.

The present study focused on men's IPV over the course of 12 years from when the men and their partners were in their early 20s through to their early 30s. A unique aspect of the study is that the men were followed across relationships with different women partners. Furthermore, some of the women were followed across relationships with different men partners to provide important descriptive data on the study questions. Despite emerging research emphasizing the bilateral nature of IPV and men's and women's involvement in IPV, far more is known about men's IPV than women's IPV (e.g., Ehrensaft, 2008; O'Leary & Woodin, 2009). Although the sample of women with new partners was relatively small (as they were not the focus of the OYS-Couples Study), such data are valuable in understanding IPV.

Hypotheses were guided by the developmental systems perspective: we expected (a) stability in men's IPV over time, such that men's aggression in late adolescence/young adulthood would predict their aggression through the late 20s to early 30s; (b) stability in aggression would be higher for men who stayed with the same partners but there would be less stability or more change in aggressive behavior for men experiencing relationship transitions (i.e., with different partners); and (c) change in men's IPV when they repartnered would be linked to women's IPV. Thus, whether men's aggression stayed at the same level, increased, or decreased would be influenced by the new partners' level of IPV.

Method

Participants

The OYS men (N = 206) were recruited at ages 9-10 years from fourth-grade classrooms from schools located in communities of higher crime-rate neighborhoods in a medium-size metropolitan area in the Pacific Northwest. The men were from families that were predominately Euro-American (90%) and 75 % working class (according to the social status index; Hollingshead, 1975). The OYS participants were assessed annually through the ages of 31-32 years, with retention rates at each time point of at least 93%. The OYS-Couples Study began when the men were aged 17-18 years with six further waves completed at ages 20-23, 23-25, 25-27, 27-29, 29-31, and 31-33 years. The present study involves the six later waves, defined herein as T1 through T6 because of limited assessment of IPV at ages 17-18 years. Only men who participated in two or more assessments could be included in the analysis (N = 184).

Demographic information for the couples is presented in Table 1. The men participated with 1 (34%), 2 (27%), 3 (14%), 4 (10%), or 5+ (5%) different partners from T1 to T6, and 10% participated with the same partner at all assessments. A small data set was also available of women who stayed with the OYS man versus changed romantic partners, allowing for some examination of the effect of relationship transitions on the stability of women's IPV. For relationships that had dissolved after the couple's participation, attempts were made from T3 on to contact and invite men's ex-partners to participate with new men partners. In total, 59 ex-partners of 40 OYS men participated (T3 $n = 19$, T4 $n = 12$, T5 $n = 15$, T6 $n = 14$; one woman participated with different partners at two time points). A dataset of women that participated two or more times in either OYS-Couples Study or ex-partners assessments with a single case for each woman ($N = 223$) was created to provide descriptive data regarding women's IPV across relationships.

Procedures

At each time point, the couple's assessment included separate interviews and questionnaires for the men and women and a series of videotaped couples discussion tasks that took place at an appointment lasting approximately 2 hours in length. The discussion tasks were as follows: warm-up (7 minutes), party planning (5 minutes), problem-solving (7 minutes for each partner's issue related to the relationship), and goals (5 minutes for each partner's goal). For more information regarding the discussion tasks including safety procedures in the study, see Capaldi et al. (2003) or Shortt et al. (2006). Informed consent was obtained at each time point and participants were compensated for their time.

Measures

Questionnaires and interview—The Adjustment with Partner--Short Form (Kessler, 1990) uses items from the National Survey of Health and Stress to assess physical and psychological aggression toward partners. The Dyadic Social Skills Questionnaire (Capaldi, 1994) assesses relationships along four factors: abuse/aggressive, caring, argumentative, and arrogant. The Conflict Tactics Scales (Straus, 1979) is a widely used measure that assesses engagement in physical and psychological attacks and use of reasoning or negotiation in response to conflict. The Partner Interaction Questionnaire (Capaldi, 1991) assesses severe psychological aggression and abuse. The Couples Interview (Capaldi & Wilson, 1994) includes assessment of relationship history and behaviors such as jealousy and fighting/abuse including IPV.

Coding of the discussion tasks—The Family and Peer Process Code (FPPC: Stubbs, Crosby, Forgatch, & Capaldi, 1998) used for the discussion tasks is a real-time code comprised of 24 content codes, including verbal, vocal, nonverbal, and physical behaviors. There were six affect ratings (happy, caring, neutral, distress, aversive, and sad) assigned on the basis of body language, vocal inflection, facial expressions, and nonverbal gestures to assess the emotional tone of each content code. Content and affect codes were independent of each other (any affect could be assigned to any content). Approximately 15% of the observations at each time point were randomly selected to be coded independently by two different coders to assess coder reliability. The overall content and affect kappas across time points ranged from .73 to .85. Coders also provided ratings on behaviors observed during the tasks including IPV.

Data Reduction

IPV construct scores were formed using the general construct building strategy that was used with the OYS (Patterson & Bank, 1986). Variables were first identified a priori as potential indicators of a given construct. Scale items were checked for internal consistency

(an item-total correlation greater than .20 and an alpha of .60 or higher) before calculating the scale by taking the mean of pertinent items. Each scale was then examined for convergence with other scales for the same construct from the same reporting agent (i.e., loading for each item on a one-factor solution had to be .30 or more). Once scales met these criteria, they were combined by calculating their mean, first within reporting agent and then the mean of each agent's global score formed the final observed construct value.

Physical aggression—The physical aggression construct was formed from three agent indicators (see Table 2): self-report and partner report, each containing scales formed of interview, questionnaire, and discussion task items; and observer report measured as the mean of physical aggression coder ratings and observed rate per minute of two content codes (physical aversive and physical aggression) in combination with four affects (neutral, distress, aversive and sad) using the FPPC coding from the discussion tasks. Physical aggression indicators were scaled from 0 to 3 before they were combined.

Psychological aggression—As with physical aggression, the psychological aggression construct was formed as the mean of self-, partner, and observer report (see Table 2). Observer report was formed as the mean of psychological aggression coder ratings and the rate per minute of three content codes (coerce, verbal attack, and negative interpersonal) in combination with four affects (neutral, distress, aversive, and sad) derived from the FPPC coding of the discussion tasks. Psychological aggression indicators were re-coded to have a scale from 1 to 5 prior to combining.

The construct indicators with example items and internal consistency (Cronbach's alphas or Pearson correlations for two item scores as appropriate) are listed in Table 2. Physical and psychological aggression were measured identically across the six time points. The IPV composite scores for women (presented in Tables 3 and 5) were formed using the mean of self- and partner report because interaction task coding was not available from the ex-partner assessments.

Analysis Plan

Correlational analyses—Using construct scores and Pearson correlations, stability in IPV over time was examined by computing autocorrelations between IPV at each participation and every subsequent participation (see Table 3), and stability in IPV by partner status was examined by computing correlations for IPV between adjacent time points for participants with the same partners and participants with different partners (see Table 4).

Change score calculation—For physical and psychological aggression separately, a score reflecting the change in men's IPV between successive time points was created by calculating the difference in IPV between most recent prior participation and current time points -- i.e., current IPV minus IPV from previous participation (e.g., T2 minus T1; T5 minus T3 if the men did not participate at T4). To control for general population time trends and thus eliminate the confound of age on IPV, the IPV construct scores were centered at each time point by subtracting that time point's sample mean from the individual scores before change scores were computed. The change scores were transformed using the inverse to reduce skewness and then were standardized across participants and observations to ease interpretation. Two sets of change scores were calculated: (a) absolute value of change to allow for upward or downward fluctuations in men's IPV over time and (b) raw or signed value of change with positive values indicating an increase in men's IPV and negative values indicating a decrease in men's IPV. Change for women's IPV was calculated in a

similar manner. However, for new partners, change scores reflected differences in levels of IPV between new partners and previous partners.

Multilevel analyses—Analyses were conducted using Mplus 5.2 (Muthén & Muthén, 1998-2007) because observations were nested within specific couples by women partners and the men. A total of 742 observations (Level 1) on 184 men (Level 2) were included in the analysis. Mplus adjusts standard error estimates to account for nonindependence because of clustering. At each time point, partner status indicating whether the man participated with the same or different partner from the preceding time point was included in the model as a binary time-varying covariate (1 = same partner; 2 = different partner) to determine if transitions in partners affected the magnitude of men's change in IPV across pairs of successive time points. The man's age across time was used as the time metric and was centered at T1 (age 20 years, on average). At Level 1, variances and covariances of men's and women's changes in IPV within couples were modeled and the random effect of change in IPV regressed on partner status and time were specified. Level 2 of the model allowed for the variances and covariances of men's and women's change in IPV between couples, as well as variances and covariances for the random effects specified at Level 1.

For both types of IPV (i.e., physical and psychological aggression), a series of four nested models were tested: (a) an unconditional model that contained only variation and covariation between men's and women's IPV change score on within and between levels, (b) a model that included partner status as a time-varying random effect, (c) a model that included the additional linear effect of time as a time-varying random effect, and (d) a parsimonious final model that excluded nonsignificant parameter estimates. Two sets of models were conducted: (a) a set with the absolute value change scores to determine stability in men's IPV as a function of same or different partners and (b) a set with raw or signed value change scores to determine whether change in men's IPV as a result of repartnering was linked to new partners and their levels of IPV.

Results

Stability in IPV over Time

As shown in Table 3 (Panel I), the autocorrelations indicated that the men's physical aggression in the early 20s (at T1) was significantly predictive of physical aggression through the late 20s (from T2 through T4), and the men's psychological aggression in the early 20s (at T1) was significantly predictive of psychological aggression through the early 30s (from T2 through T6). For descriptive purposes, correlations are also presented for women (Table 3, Panel II).

As shown by the means and standard deviations of the IPV construct scores in Table 4, men's physical aggression appeared to decrease from T1 to T6 while the men's psychological aggression remained relatively similar over time. Although the women were different individuals over time because of the men's transitions from one relationship to another, means and standard deviations for the women were included in Table 4 for descriptive purposes. Overall, the trends in aggression levels for women over time looked similar to those for men. For comparability with other studies, means and standard deviations of the raw CTS scores are also presented in Table 4. The scale of the CTS was from 1 ("never or less than once a year") to 7 ("daily"). To further assist with comparisons, prevalence rates of any aggression were also derived from the two types of aggression at each time point. At T1, 60% of the men showed any physical aggression toward a partner, which dropped to 25% of the men at T6; the prevalence for women was 75% at T1 and 33% at T6. The prevalence rate of psychological aggression was 99% at T1 and 100% at T6 for

men and 99% at both T1 and T6 for women. Thus, essentially all men and women engaged in at least some psychological aggression toward a partner.

Change in IPV across Relationships

Correlations by partner status—To determine whether stability in IPV was associated with partner status, the IPV construct scores were correlated between adjacent time points by partner status. As shown in Table 5 (Panel I), there was significant stability in the men's physical and psychological aggression across adjacent time periods if they stayed with the same partners but weaker and usually nonsignificant stability when men had different partners over time. Correlations are also presented for the women that participated with same and different partners for descriptive purposes (Table 5, Panel II). The findings for women indicate a similar pattern, but the correlations across different partners appear to be more variable; it seems likely that this was because of smaller sample sizes across adjacent time points.

Multilevel random effects modeling utilizing absolute value change scores—The final model for men's physical aggression indicated significant random effects of partner status and linear time on change scores across time points in men's physical aggression toward a partner. The fit statistics for the final model was a log likelihood of -1839.14 with a deviance of 367828, scaling correction factor of 1.52, 17 free parameters, and a model AIC of 3712.28. The mean estimated change of .33 in the men's physical aggression because of partner status was significantly greater than 0, suggesting that there was greater change in the men's physical aggression when the men had new women partners. For the women's physical aggression, the mean estimated change because of partner status of .38 was significantly greater than 0 and showed significant variation, suggesting that the level of physical aggression of new partners were significantly different from that of the prior partners. The significant time effect indicated that there were larger changes between time points in the men's and women's physical aggression in the early 20s than by the early 30s.

For men's psychological aggression, partner status but not linear time was significantly related to changes in men's psychological aggression. The fit statistics for the final model was a log likelihood of -1936.91, with a deviance of 3873.83, a scaling correction factor of 0.91, 15 free parameters, and a model AIC of 3903.83. The mean estimated change of .47 in the men's psychological aggression because of partner status was significantly greater than 0, suggesting that there was greater change in the men's psychological aggression when the men had transitioned from one partner to another. For the women's psychological aggression, the mean estimated change because of partner status of .48 was significantly greater than 0, suggesting that the level of psychological aggression of a new partner was significantly different from that of the prior partners.

Multilevel random effects modeling using raw or signed value change scores—The fit statistics for the final model for men's physical aggression was a log likelihood of -1939.39, a scaling correction factor of 2.24, 10 free parameters, and a model AIC of 3898.77. Changes in men's physical aggression when repartnering and differences in new partners' physical aggression from previous partners' physical aggression were significantly associated at Level 2 (estimated covariance = .33, $p < .001$).

The fit statistics for the final model for men's psychological aggression was a log likelihood of -1698.23, a scaling correction factor of 1.05, 10 free parameters, and a model AIC of 3416.45. As with physical aggression, changes in the men's psychological aggression when repartnering and differences in new partners' psychological aggression from previous

partners' psychological aggression were significantly associated at Level 2 (estimated covariance = .49, $p < .001$).

Discussion

This study examined stability in young men's IPV over the course of 12 years. The study was unique in following the men across romantic relationships to determine stability and change in IPV as a function of relationship continuity or staying with the same partners versus relationship discontinuity and changing to different partners. The study was also able to provide rare descriptive data on women's IPV across relationships.

Regarding stability, men's physical aggression in their early 20s predicted physical aggression in their late 20s about 7 years later (but not to later ages), and men's psychological aggression in their early 20s predicted psychological aggression in their early 30s about 10 to 12 years later. Levels of physical aggression were highest when the men were in their early 20s and decreased over time, extending the findings of previous research (e.g., Kim et al., 2008). Prevalence rates indicated that 25% of the men (and 33% of the women) showed any physical aggression toward partner in their early 30s. The levels of men's psychological aggression, on the other hand, appeared to be relatively similar over time with prevalence rates at 100% for the men (and 99% for the women) when they were in their early 30s, indicating that at least occasional criticisms or unkind comments are ubiquitous in romantic relationships in young adulthood.

Most of the men (or 90%) changed partners over time, and as hypothesized, relationship continuity was related to stability in their levels of IPV such that stability in IPV was higher for men who stayed with the same partners and lower for men who changed partners. This finding is consistent with prior research conducted over shorter periods of time (Capaldi et al., 2003; Fritz & Slep, 2009) and also with the developmental systems perspective that suggests IPV is less likely to change in established environments that sustain partner behavior and interactional patterns.

Partners' level of IPV also impacted the stability of men's IPV, emphasizing the strong proximal influence of partner behavior. Change in men's IPV was associated with relationship transitions and partners' IPV in the multilevel modeling. Differences in new partners' level of IPV from prior partners' level of IPV was associated with change in men's levels of IPV related to relationship transitions. Important for understanding the dynamics of IPV, there was greater change in the physical and psychological aggression of the men who changed partners compared to the men who remained with the same partners. The levels of IPV of the new partners and differences between new partners' IPV and previous partners' IPV were linked to changes in men's IPV that occurred with repartnering. The interplay between men's and women's IPV suggests that if the men repartnered with a less aggressive woman than his previous partner, their level of IPV decreased; whereas if the men repartnered with a woman who was more aggressive than his previous partner, the men's IPV increased. In this manner, continuity in men's IPV from one romantic relationship to the next was likely if the men's new partners and previous partners engaged in similar levels of IPV. Overall, less change took place in the men's physical aggression over time as men's levels of such aggression dropped and as fewer men changed partners. In this sample, 60% of the men changed partners in their early 20s compared to 26% of the men in their early 30s.

Findings for the women, although on a largely descriptive level because of the limited sample size, seemed to indicate that, similar to the men, they show significant stability in levels of both physical and psychological aggression toward a partner over time within a

particular romantic relationship, but there was much less indication of stability in women's aggression toward a partner across romantic relationships. Thus, levels of women's IPV seem to be responsive to dyadic and environmental contingencies in a similar fashion to that of men in these respects. Further testing in studies with larger samples of women is needed.

Limitations in the study indicate directions for future research. The sample was largely lower socioeconomic status and predominantly Euro American. Findings may not generalize to couples of higher economic status and other cultural backgrounds. The research design of the study with a longitudinal focus on the men yielded limited data on women's IPV beyond partner influence on the men's IPV. Stability in women's IPV warrants further attention to learn whether findings with the men generalize to women and further the understanding of relationship processes involved in the stability of IPV. Consideration of partner characteristics, such as risk factors, could build on the findings in the present study. For example, antisocial behavior (e.g., Moffitt, Caspi, Rutter, & Silva, 2001), alcohol abuse (e.g., Feingold, Kerr, & Capaldi, 2008), and depressive symptoms (e.g., Kim et al., 2008) have been identified as co-occurring with IPV. As well, couples may be similar on risk factors through the process of assortative partnering (e.g., Kim & Capaldi, 2004). The presence of risk factors likely plays a role in the stability of IPV. Effectively treating IPV may also involve the reduction of risk factors (e.g., Stith, 2006).

Policy Implications

The evidence that relationship continuity and partner IPV contributed to the stability of men's IPV has several implications. Repartnering with less aggressive women can disrupt men's continuity in IPV. However, many couples that experience IPV in their relationships do not choose to separate (Shortt, Capaldi, Kim, & Laurent, 2010). The strength of stability in men's IPV with the same partners across young adulthood indicates that early prevention or intervention before relationship patterns become entrenched is important. Continuity in men's IPV was dependent on whether their partners were also aggressive, which suggests that intervening with men without either involving their partners or focusing on relationship processes is unlikely to reduce IPV (Stith & McCollum, 2009). Yet, approaches that exclude these foci predominate in current treatment of IPV. These findings therefore support a focus on behavior of both partners and thus on the dyadic interactions to prevent and treat IPV. Emerging research indicates that conjoint approaches and couple-focused interventions may be a safe and effective option to reduce IPV in romantic relationships (e.g., LaTaillade, Epstein, & Werlinich, 2006; Stith & McCollum, 2009).

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Table 1

Couple Information T1 to T6

	T1	T2	T3	T4	T5	T6
Men's age	21.25 (.85)	24.10 (.65)	26.15 (.61)	28.08 (.61)	30.06 (.62)	32.04 (.56)
Women's age	20.66 (3.21)	23.16 (3.84)	24.90 (4.06)	26.42 (4.20)	27.84 (4.36)	30.16 (4.68)
Men with new partners	60%	46%	36%	29%	28%	26%
Relationship status						
Dating	44%	29%	20%	21%	18%	14%
Living together	38%	37%	38%	33%	29%	25%
Married	18%	35%	43%	46%	53%	62%
Relationship length in weeks	83.79(74.00)	148.66(118.32)	182.35(147.27)	218.38(166.90)	274.30(198.43)	340.54(235.89)
N	152	147	159	157	160	151

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Table 2

Intimate Partner Violence Constructs and Measures

Measure	Items	Example Item	Range of Reliability across T1-T6	
			Man	Woman
Physical Aggression				
Self-report				
Adjustment with Partner (Kessler, 1990)	2	When disagree, how often do you push, grab shove, throw something at partner, slap, or hit?	.30–.59	.31–.61
Dyadic Social Skills Questionnaire (Capaldi, 1994)	1	You sometimes hurt your partner (e.g., hit partner or twist partner's arm)?	n/a	
Conflict Tactics Scale (Straus, 1979)	6	Threw something at partner.	.58–.92	.66–.85
Partner Report Adjustment with Partner (Kessler, 1990)	2	When disagree, how often does partner push, grab, shove, throw something at partner, slap, or hit?	.43–.67	.40–.74
Dyadic Social Skills (Capaldi, 1994)	1	Your partner sometimes hurts you (e.g., hit or twist your arm)?	n/a	
Conflict Tactics Scale (Straus, 1979)	6	Threw something at you.	.65–.93	.74–.92
Couples Interview (Capaldi & Wilson, 1994)	1	How many times has your partner hurt you?	n/a	
Coder Report				
Coder Ratings (Capaldi & Crosby, 1995)				
Moderate Physical Aggression	2	Pushed, grabbed, slapped partner during task?	-.03–.48	-.09–.49
Severe Physical Aggression	2	Kicked, bit, or hit partner during task?	-.01–.69	-.01–1.00
Coded Physical Aggression (FPPC; Stubbs et al., 1998)	n/a	Rate per minute of aversive physical content during task	n/a	
Psychological Aggression				
Self-Report				
Adjustment with Partner (Kessler, 1990)	1	When disagree, how often do you insult or, swear, sulk or refuse to talk, stomp out of the room, threaten to hit?	n/a	
Dyadic Social Skills Questionnaire (Capaldi, 1994)	10	Say mean things about your partner behind your partner's back.	.85–.91	.82–.87
Conflict Tactics Scale (Straus, 1979)	6	Yelled or insulted partner.	.67–.82	.65–.76
Couples Interview (Capaldi & Wilson, 1994)	1	Name calling, threats, sulking or refusing to talk, screaming or cursing, throwing or breaking something [not at partner], during most severe fight in past year lost my temper.	n/a	
Partner Report Adjustment with Partner (Kessler, 1990)	4	When disagree, how often does your partner insult or swear, sulk or refuse to talk, stomp out of the room, threaten to hit?	.68–.81	.74–.84
Dyadic Social Skills Questionnaire (Capaldi, 1994)	10	Your partner blames you when something goes wrong.	.86–.91	.89–.93
Conflict Tactics Scale (Straus, 1979)	6	Yelled or insulted you.	.73–.82	.79–.85
Couples Interview (Capaldi & Wilson, 1994)	1	Name calling, threats, sulking or refusing to talk, screaming or cursing, throwing or breaking something not at you?	n/a	

Measure	Items	Example Item	Range of Reliability across T1-T6	
			Man	Woman
Partner Interaction Questionnaire (Capaldi, 1991)	16/17	Broken or damaged something of yours on purpose?	.79–.94	.81–.91
Coder Report				
Coder Ratings (Capaldi & Crosby, 1995)	11	Derogatory, sarcastic to partner in task, or called partner in task negative names (e.g., jerk, dummy)	.90–.94	.89–.94
Coded Psychological Aggression (FPPC; Stubbs et al., 1998)	n/a	Rate per minute of negative interpersonal, verbal attack, and coercive behavior during task	n/a	

Table 3

Autocorrelations of Intimate Partner Violence Over Time

Panel I: Men

	T1	T2	T3	T4	T5	T6
T1	-----	**.37****	**.22****	**.22***	**.13**	**.01**
T2	*.45***	-----	**.44****	**.25***	**.30****	**.15**
T3	*.49***	*.52***	-----	**.44****	**.45****	**.34****
T4	*.33***	*.46***	*.50***	-----	**.53****	**.44****
T5	*.28***	*.28***	*.46***	*.44***	-----	**.40****
T6	*.36***	*.39***	*.52***	*.48***	*.48***	-----

Panel II: Women

	T1	T2	T3	T4	T5	T6
T1	-----	**.52****	**.23**	**.36****	**.19**	**.23**
T2	*.57***	-----	**.42****	**.34****	**.17**	**.22**
T3	*.35***	*.49***	-----	**.46****	**.54****	**.46****
T4	*.46***	*.54***	*.54***	-----	**.47****	**.53****
T5	*.32**	*.61***	*.51***	*.68***	-----	**.57****
T6	*.48***	*.58***	*.58***	*.66***	*.53***	-----

Note. N's were 125-145 for the men and 79-125 for the women. Physical aggression correlations are above the diagonal and psychological aggression correlations are below the diagonal in each panel.

** $p < .01$.

Table 4

Intimate Partner Violence Means and Standard Deviations Using Construct and CTS Scores

	T1	T2	T3	T4	T5	T6
Physical Aggression						
Construct Scores (scale 0-3)						
Men	.18 (.26)	.13 (.22)	.10 (.19)	.07 (.15)	.07 (.15)	.05 (.15)
Women	.29 (.33)	.18 (.26)	.13 (.21)	.09 (.17)	.07 (.14)	.07 (.13)
CTS Scores (scale 1-7)						
Men	1.15 (.35)	1.06 (.14)	1.04 (.17)	1.06 (.21)	1.04 (.14)	1.03 (.13)
Women	1.23 (.43)	1.08 (.20)	1.05 (.18)	1.05 (.15)	1.03 (.11)	1.04 (.16)
Psychological Aggression						
Construct Scores (scale 1-5)						
Men	2.13 (.66)	2.01 (.67)	1.93 (.60)	1.92 (.64)	1.90 (.60)	1.86 (.63)
Women	2.20 (.68)	2.13 (.66)	2.06 (.57)	2.00 (.63)	1.97 (.61)	1.99 (.67)
CTS Scores (scale 1-7)						
Men	1.91 (.77)	1.78 (.69)	1.65 (.64)	1.70 (.70)	1.62 (.58)	1.71 (.73)
Women	2.00 (.81)	1.85 (.70)	1.68 (.60)	1.69 (.63)	1.66 (.57)	1.73 (.74)

Note. Construct scores used contained self-, partner, and coder reports. CTS scores used were the mean of self- and partner reports.

Table 5

Correlations of Intimate Partner Violence by Partner Status

Panel I: Men's Intimate Partner Violence

	Same Women Partners		New Women Partners	
Time	**Physical**	**Psychological**	**Physical**	**Psychological**
T1 and T2	.49**	.57**	.20	.31*
T2 and T3	.51**	.71**	.12	.19
T3 and T4	.53**	.63**	.34*	.28
T4 and T5	.61**	.55**	.25	.12
T5 and T6	.46**	.58**	.21	.03

Panel II: Women's Intimate Partner Violence

	Same Men Partners		New Men Partners	
Time	**Physical**	**Psychological**	**Physical**	**Psychological**
T1 and T2	.52**	.57**	n/a	n/a
T2 and T3	.57**	.59**	-.15	.11
T3 and T4	.55**	.56**	-.21	.33
T4 and T5	.61**	.68**	.07	.66**
T5 and T6	.50**	.60**	.82**	.07

Note. For same partners, *N*'s were 79-115 for men and women; for different partners, *N*'s were 39-52 for the men and 12-18 for the women.

** $p < .01$.

* $p < .05$.