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# Anger, Control, and Intimate Partner Violence in Young Adulthood

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## Abstract

A common theme in the literature is that intimate partner violence (IPV) is not about anger, but about power and control. While prior research has focused either on respondents' or partners' controlling behaviors, an interactionist perspective provides the basis for hypothesizing that both respondent and partner control will be significantly related to the odds of reporting perpetration, and that emotional processes are a component of IPV experiences. Analyses rely on interview data collected at waves 1 and 5 of a longitudinal study (Toledo Adolescent Relationships Study; n = 928) of adolescent and young adult relationships. Results indicate that after controlling for traditional predictors, both respondent and partner control attempts and measures of anger (including a measure of relationship-based anger) contributed significantly to the odds of reporting perpetration. Further, these patterns did not differ by gender, indicating some areas of similarity in the relationship and emotional processes associated with variations in men and women's IPV reports.

## Keywords

anger; control;	; ıntımate partnei	violence; yo	oung adult	relationship	8

#### Introduction

In spite of recent calls for integration, theories of intimate partner violence have tended to develop along distinct paths, and are often considered opposing frameworks (Bell & Naugle, 2008; Langer & Lawrence, 2012). One tradition based in social learning theory has focused on the importance of risk factors such as early exposure to violence within the family (Mihalic & Elliott, 1997; Shook, Gerrity, Jurich, & Segrist, 2000). Researchers have suggested that these experiences develop as learned responses and lifestyle factors associated with the use of aggression across multiple contexts. Other researchers have focused on individual differences in emotional reactivity, and thus have explored the idea of a general propensity for angry expression.

Feminist theorizing more often centers on unique features of this form of violence, suggesting that broad-based gender inequalities and patriarchal attitudes influence conduct

within the realm of intimate relationships. Thus, research and prevention/intervention efforts based on the latter tradition foster a view of IPV as not so much about anger as about power and control (Anderson, 2005; Dobash & Dobash, 1979; Komter, 1989; Smith, White, & Moracco, 2009). In broad outlines, then, anger is a concept that fits more readily with social learning or propensity arguments, and control is a centerpiece of the feminist perspective. While not fundamentally incompatible emphases, anger and control have not been fully linked conceptually, nor often examined within the context of the same study designs. This bifurcation of theory and associated research is potentially limiting to the development of a comprehensive understanding of mechanisms underlying IPV, and has influenced the direction of policy and program efforts. Thus, a key objective of the current study is to examine empirically the associations between anger, controlling behaviors, and IPV perpetration.

A related objective is to develop a more localized view of both anger and control as emotions and behaviors that unfold within specific relationship contexts. While feminist perspectives have moved the lens somewhat closer to the world of male-female relationships, a criticism of both social learning or propensity arguments and feminist theories is that they can be considered theories of importation. That is, such theories, as typically described, focus on what is brought into the relationship either by virtue of early family exposure, personality traits, or the spillover effects of one's antisocial lifestyle on the one hand or to effects of patriarchal arrangements and associated gender role socialization on the other. However, numerous scholars have called for greater attention to dynamics within the relationship itself (e.g., Bartholomew & Cobb, 2010; Giordano, Soto, Manning, & Longmore, 2010; Winstok, 2007), a perspective that is most compatible with interactionist theories (Felson, 2002; Stets, 1992). In the current study, we consider whether emotions linked to the partner (relationship-based anger) and relationship specific behaviors (partners' attempts to control one another's actions) make a difference for understanding variations in IPV perpetration, once controls such as family exposure and the delinquency of both members of the couple have been taken into account. Consistent with an interactionist perspective, we move beyond consideration of one partner's control attempts in assessing empirically the controlling behaviors of respondents as well as their partners.

A final objective of the current study is to explore the role of gender as an influence on these relationship-specific processes, and in turn reports about IPV. The interactionist perspective in general and the issue of women's perpetration in particular have been the source of considerable controversy. While it is generally acknowledged that consequences of men's perpetration are often more serious relative to effects of women's perpetration, there is less consensus about the level of similarity or difference in the processes leading to men's and women's use of violence within their relationships. Thus, as a final step in the analysis, we estimate interactions of gender and the focal variables (anger, partner control, respondent's control) as influences on self-reports of IPV perpetration. This will allow us to assess whether men's and women's reports of relationship-based anger and about their own and partners' controlling behaviors have a similar or distinct relationship to variations in the odds of self-reporting IPV perpetration.

## Literature Review

## Traditional Risk Factors: A Focus on Anger

Prior research on etiological factors associated with IPV has emphasized the role of early exposure to violence within the family, and researchers have focused considerable attention on risk factors such as witnessing parents' violence as well as being abused as a child (see Cui, Ueno, Gordon, & Fincham, 2013; Gomez, 2011; O'Donnell et al., 2006; Simons, Lin, & Gordon, 1998). Wolf and Foshee (2003) explicitly suggested a role for anger as a mediator of these family experiences, concluding that children exposed to family violence may "develop different anger expression styles than children who are not exposed to family violence" (p. 311). Other studies focusing on emotions and IPV have conceptualized anger as an individual difference or trait (Agnew, Brezina, Wright, & Cullen, 2002; Eckhardt, Samper, & Murphy, 2008; Follingstad, Wright, Lloyd, & Sebastian, 1991; Moffitt, Krueger, Caspi, & Fagan, 2000; Swan, Gambone, Fields, Sullivan, & Snow, 2005). Finally, previous studies have centered on the antisocial tendencies of the individual (e.g., delinquency involvement), which further supports the idea of a general tendency toward violence (Capaldi et al., 2012; Herrera et al., 2008; Lussier, Farrington, & Moffitt, 2009; O'Donnell et al., 2006; Theobold & Farrington, 2012). Some studies within the latter tradition have moved toward a dyadic framework, as they have considered the personal characteristics of both members of the couple. For example, Moffitt, Robins, and Caspi (2001), in a study of 360 couples, demonstrated that the negative emotionality of both partners contributed to the odds of IPV perpetration. Similarly, Herrera et al. (2008), relying on data from the National Longitudinal Study of Adolescent Health (Add Health), found that the delinquency of respondent and partner contributed to odds of perpetrating IPV.

In spite of these significant associations, longitudinal research on patterns of IPV has also documented that even when risk is elevated (based on family history, delinquent background), individuals frequently exhibit significant variability in behavior across time and different relationships (Capaldi, Shortt, & Crosby, 2003; Smith, Ireland, Park, Elwyn, & Thornberry, 2011). Such observed patterns of variability suggest the utility of including attention to relationship-specific processes, as well as family background and other traditional risk factors.

#### Feminist Perspectives—A Focus on Control

The feminist perspective has emphasized the degree to which macro-level gender inequalities tend to be replayed at the couple level (Komter, 1989). A central theme is that violence against women can best be understood as a means of maintaining control over female partners (Boonzaier, 2008; Jackson, 1999; Larkin & Popaleni, 1994). Traditional gender socialization prepares young men to want and expect that they will hold a position of dominance, and thus controlling behaviors, including violence, are used to assert or maintain a favorable power position within their relationships. In placing central attention on men's controlling actions, this develops the idea of much violence as strategic, and has had the effect of shifting the focus away from emotional processes. As Felson (2002, p. 28) noted, conceptualizing men's actions as stemming from an emotional 'outburst' may serve to mitigate the seriousness and indeed the intentionality of men's violent actions. This turn

away from emotional processes is potentially consequential, as some scholars and practitioners have argued against the strategy of offering anger management as a treatment option for male perpetrators (Bancroft & Silverman, 2002; Gondolf & Russell, 1986). Also in line with the focus on men's control, women's emotions, controlling behaviors, and use of violence are not often explored within a traditional feminist framework, and at the applied level, couples counseling is also generally considered a counterproductive intervention option (Maiuro & Eberle, 2008).

A frequent criticism of the feminist perspective is that the focus on broad-based societal level processes does not provide a basis for understanding systematic patterns of variation within a given sample in men's or women's use of violence (Archer, 2000; Capaldi, Kim, & Shortt, 2007; Hettrich & O'Leary, 2007; Holtzworth-Munroe, 2005). For example variation in endorsement of traditional gender beliefs is somewhat inconsistent as a correlate of IPV (Coleman & Straus, 1986; Dutton, 1995; Hotaling & Sugarman, 1986). Further, this general approach is not sensitive to observed life course and relationship-specific variations in men's patterns of IPV, nor comprehensive as an explanation for women's controlling actions or use of aggression within their relationships. Thus, feminist theories have effectively highlighted that IPV has unique characteristics associated with the intimate couple context, but have tended to bracket off consideration of dyadic and emotional processes that may be implicated in the full range of IPV experiences.

## **Interactionist Views of Control Processes and Violence**

Interactionist theories stress that while one's role in conflicts may vary (i.e., whether as perpetrator, victim, or participant in mutual violence), interaction and communication are nevertheless generally important to understanding the sequences that eventuate in violent action (Athens, 2005; Felson, 2002; Stets, 1992). This idea accords with a substantial body of research that has documented a link between verbal and physical conflict (Murphy & O'Leary, 1989; Schumacher & Leonard, 2005). Even where the focus is on a very one-sided act of violence, then, a level of disagreement or contestation generally precedes the violent action. It is intuitive to conceptualize verbal conflict as including a dyadic element, but this may also be a feature of control processes. For example, Stets documented higher levels of the use of control by female relative to male respondents (Stets, 1993; Stets & Hammons, 2002), and (authors) documented a similar pattern. And in connection with the latter study, male respondents on average continued to report higher levels of partner control attempts and a less favorable power position within their relationships as they were followed up across the transition to adulthood (authors, 2012). Stets' research also documented a link between these control dynamics and IPV, as male and female respondent reports about their own controlling actions were associated with aggression inflicted and sustained (Stets, 1992; Stets & Pirog-Good, 1990; see also Felson & Outlaw, 2007).

Taken together, the above studies suggest that a comprehensive view of the dynamics within intimate relationships as well as an understanding of control-violence connections will likely necessitate attention to the role of control attempts on the part of female as well as male partners (see also Straus & Gozjolko, 2014). We contribute beyond prior work in the

interactionist tradition by measuring respondents' own use of control as well as that of partners as influences on the odds of experiencing violence within the relationship.

## Toward a 'localized' perspective on controlling behaviors and angry emotions

A potentially limiting aspect of prior theorizing about relationship dynamics and IPV is that dominance over the other partner is often conceptualized as the overarching goal or endpoint. Although violence and even controlling behaviors are on some level dominance moves (Athens, 2005), this suggests that the individual's primary concern is for acquiring and maintaining a favorable power position within the intimate relationship. Interactionist theories highlight to a greater extent that specific actions tend to be 'situated,' that is responsive to the immediate circumstances individuals confront. Thus attempts to control the partner may relate directly to specific 'domains of contestation' that may become important sites of conflict. During young adulthood both women and men are in the process of changing their style of socializing from a heavy emphasis on peers to a more concentrated focus on romantic relationships, developing a greater level of commitment to a particular partner, and attempting to solidify their present and future economic prospects (Arnett, 2004; Settersten & Ray, 2010). Across the transition to adulthood, relationships increase in average duration and significance, but often lack the cultural and legal weight of marriage bonds. Thus, during this period of flux and changing expectations, partners may not be on the same timetable or hold the same perspective regarding these important transitions. Further, if we consider that control attempts are often linked to such domains of contestation, the previous findings documenting relatively high scores of young men on partner control attempts and women's own self-reports about their controlling actions are rendered more intuitive and understandable. For example, most research has shown that on average male partners report higher levels of infidelity or 'concordance' (Ford, Sohn, & Lepkowski, 2002; Miller & White, 2003) relative to their female counterparts, and recent analyses have shown that infidelity is a key domain of contestation within relationships associated with IPV (Nemeth, Bonomi, Lee, & Ludwin, 2012; authors 2015).

This 'situated' or localized perspective also provides a basis for including attention to emotional processes. Scholars of emotion have increasingly positioned against the idea of reason and emotion as opposing forces, instead forging a variety of interconnections (Lively & Heise 2004; Seeburger, 1992). As Mead (1934) noted, routine, habitual behaviors occasion little reflection or emotion. In those situations in which actions are blocked, however, the individual cannot move forward relying solely on previously taken-for-granted repertoires. It is within situations involving blocked action, then, that thoughts (cognitions) and feelings (emotions) arise. Thus, the presence of control attempts itself, and particularly the use of strident or intrusive control, signals a previous failure to control, manage, or complete action relating to specific contested domains. These domains have been rendered problematic through the process of communication that occurs within the relationship. Further, if we accept the general notion that control attempts derive from the perception that desired actions are blocked, then it follows that emotions should also come to the fore within these same situations.

# **Current Study**

Based on the above literature review and conceptualization, we draw on interviews conducted with a large, heterogeneous sample of young adult male and female respondents to explore empirically the linkages between anger, control, and IPV. We hypothesize that both respondent and partner control will contribute to the odds of reporting violence, and further that combinations that include higher than average levels of controlling behaviors on the part of respondent and partner will be an especially risky pattern.

We hypothesize further that control attempts and anger often coexist as dynamic processes associated with IPV, and should not be opposed conceptually (i.e., the notion that it is not about anger, but about power and control). Incorporating anger into the sequences of action and reaction associated with IPV is intuitive, and provides a conceptual bridge between traditional predictors (e.g., violence within the family, growing up in a disadvantaged context) and concerns that are specific to a given intimate relationship. In the current study, we thus consider two dimensions of anger. First, as research such as that of Wolf and Foshee (2003) suggests, and emotion scholars have noted, the emotional self is a recognized feature of one's identity (Engdahl, 2004; Lupton, 1998). Although *anger identity* is likely to be shaped by earlier experiences, it represents a unique crystallization and interpretation of those experiences. However, a second dimension of anger is further situated in light of the specific concerns within a given relationship. In the current study, then, we focus not only on anger identity but also *relationship-based feelings of anger*.

This localized interactionist perspective also provides a conceptual basis for understanding women's actions within their relationships, and possible reactions to specific areas of discord. As relationships are considered central to women's lives and development (Gilligan, 1982), it is unlikely that they are inured to 'blocked action' within intimate contexts, as partners resist their desired goals, intentions, and preferred ideas about the direction of the relationship. This in turn suggests that women's feelings of anger and attempts to control their partners may also be present, heighten discord, and significantly associated with the odds of experiencing violence. This provides a theoretical rationale for the current investigation to determine whether anger and control are similarly related to male and female self-reports of perpetration in a current/most recent intimate relationship. In addition to determining whether anger adds additional variance once control processes have been taken into account, we consider whether the presence of high levels of mutual control accompanied by anger emerges as an especially risky pattern.

## **Data and Methods**

This research draws on data from the TARS, which is based on a stratified random sample of 1,321 adolescents and their parents/guardians. The TARS data were collected in the years 2001, 2002, 2004, 2006, and 2011. The analyses rely on structured interviews conducted at the first (2001) and fifth (2011) interviews, and a parent questionnaire administered at the first interview. The sampling frame of the TARS study encompassed 62

<sup>&</sup>lt;sup>1</sup>For more information about the study and procedures for accessing public use files see http://www.icpsr.umich.edu/icpsrweb/DSDR/series/00252.

schools across seven school districts, but school attendance was not a requirement for inclusion in the study. Most interviews took place in respondents' homes. The parent or guardian (typically the mother) completed a (paper and pencil) questionnaire and responses were used to assess parental coercion, neighborhood disadvantage, and other sociodemographic information described in more detail below. All interviews with the teen and young adult respondents were completed using preloaded laptops, in order to ensure privacy. The stratified, random sample includes over-samples of Black and Hispanic adolescents. The initial sample included 1,321 respondents and wave 5 retained 1,021 valid respondents, or 77% of wave  $1.^2$  The analytic sample includes all those who participated in the wave 5 interview, but individuals who were not identified as Black, White, or Hispanic were excluded (n = 23), as were those respondents who did not report about a current or most recent relationship (n = 70). The final analytic sample thus consists of 928 respondents (422 males and 506 females).

#### Measures

Table 1 presents descriptive statistics for all study variables for the total sample and IPV status (whether or not the respondent self-reported IPV perpetration).

**Dependent Variables**—Our analyses explored variations in *self-reported IPV* perpetration as reported at wave 5 (alpha = .91), and is based on responses to 12 items from the revised Conflict Tactics Scale (CTS) (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). However, we also estimated all models focusing on similar items indexing victimization, a measure of "any violence" (whether as perpetrator or victim), and various measures of severity. Results were similar, regardless of the form of the dependent variable.

**Key Independent Variables**—We note that while traditional predictors and other sociodemographic factors were all measured at wave 1, control, anger, and IPV were all assessed at wave 5. This approach is appropriate within the context of the current study, as our goal is to provide a descriptive portrait of dynamics within these relatively fluid dating and cohabiting relationships. It is thus critical that the reports about relationship dynamics and emotional reactions reference the same partner who is the focus of the IPV reports. However, this limits our ability to firmly establish a causal order in relation to what may be best characterized as a package of interrelated and dynamic relationship processes.

Controlling behaviors within the relationship were indexed by questions focusing on actions of the respondent as well as those of their partner. Partner control included six items from a series of questions asking respondents how often their partners engaged in behaviors including "try to control you" and "monitored my time and made me account for my whereabouts" (alpha=.85). In addition a similar set of questions indexed respondent control (alpha = .75), referencing the respondent's own use of such tactics.

<sup>&</sup>lt;sup>2</sup>Attrition analyses indicate that subjects retained did not differ significantly on most dimensions (e.g., wave 1 IPV report, parental coercion, and delinquency), but were somewhat more likely to be female, and to report a non-traditional (step-parent, single-parent, and 'other') family structure. Additionally, Black respondents and those reporting low levels of parental education (less than high school) were less likely to be retained.

Anger. Anger was conceptualized as including an identity component as well as being an emotion potentially linked to interactions with the romantic partner. Anger identity was based on nine questions tapping trait-based anger taken from the State-Trait Anger Expression Inventory for children and adolescents (STAXI-CA) and included items such as "I get annoyed easily," "I get angry very quickly," and "I can be a pretty mean person" (alpha = .85). This widely used scale has demonstrated acceptable concurrent and discriminant validity (del Barrio, Aluja, & Spielberger, 2004; Spielberger, 1988). Relationship-based anger included three items from a larger list of emotions experienced "the last time you were with your partner." Of the possible responses (e.g., excited, afraid, comforted, etc.), we included in this index respondents' levels of agreement that they had felt "hostile," "frustrated," and "upset" the last time they were with the partner (alpha = .84). In the interest of parsimony, supplemental models that construct dummy variables referencing a large number of anger and control combinations (shown in Table 3) relied on a composite index of anger that includes both of these dimensions.

**Traditional Predictors**—Witnessing parental violence is a 4-item revised version of the CTS2 (alpha = .78) based on the respondent's wave 5 retrospective report, but referencing the parent's behavior. Coercive parenting was measured using a single item from the wave 1 adolescent report asking respondents: "When you and your parents disagree about things, how often do they push, slap, or hit you?" Disadvantaged neighborhood is a 10-item scale (alpha = .91) from the wave 1 parent questionnaire in which parents were asked about 10 potential problems in their neighborhoods (e.g., rundown buildings, fights, unemployment). Responses were first dichotomized to indicate whether these items posed a problem (1 =yes), and then summed. Violent peers is a single wave 1 item asking respondents: "In the last 12 months, how often have your friends attacked someone with the idea of seriously hurting them?" Responses ranged from 1 (never) to 9 (more than once a day). Respondent delinquency was measured at wave 1 (alpha = .84) and criminal involvement at wave 5 (alpha = .71) using a 10-item version of Elliott and Ageton's (1980) self-report instrument. Partner's criminal involvement (alpha = .78) was measured at wave 5 using a 10-item scale identical to the delinquency scale described above, referencing the partner. Delinquency scales were constructed as variety scores, which possess high reliability and validity and lessen the relative influence of less serious items (Sweeten, 2012). In order to control for the effects of traditional gender role attitudes, we relied on a single item assessing respondents' level of agreement with the following: "In most relationships the guy should be in charge."

Sociodemographic Variables, Adult Status Characteristics, and Basic Relationship Indices—We included a series of sociodemographic indicators: *gender* (male is the contrast category); *age*; *race/ethnicity* including non-Hispanic White (contrast category), non-Hispanic Black, and Hispanic; *family structure* including two biological parents (contrast category), step-family, single-parent family, and any "other" family type; and *socioeconomic status* as measured by the highest level of education reported in the wave 1 parent questionnaire. Additionally, we included measures of the respondent's adult status characteristics. Three dummy indicators, *full-time*, *part-time*, and *unemployed* (contrast category), were used to account for respondent's employment status at wave 4, and status as a *parent* was determined by a question asking whether the respondent has any children.

We included a series of basic relationship variables in the models. To control for relationship status, three dummy indicators indicated whether the relationship of interest was *dating* (contrast category), *cohabiting*, or *married*. Additionally, a dummy variable was used to denote whether responses reference a *current relationship* or their most recent romantic relationship (1 = current). *Relationship duration* was measured by asking how long respondents have/had been with their current or most recent partners. The range is from less than a week (1) to a year or more (8).

#### **Analytic Strategy**

All statistical models were estimated in SAS 9.3. We estimated zero-order logistic regression models predicting IPV perpetration. Next we estimated a model that included all of the traditional predictors of IPV (parental coercion, disadvantaged neighborhood, violent peers, early and current delinquency/criminal involvement and current partner's criminal involvement) along with other relevant controls. Subsequently, models examined the associations between the two indices of control (respondent and partner) followed by a model that introduced the two anger indices (anger identity, relationship-based anger). In addition to the violence predictors and sociodemographic characteristics, these models also included controls for basic characteristics of the relationship (duration of the relationship, cohabitation/marital status, whether the report references a current or most recent relationship), traditional gender role attitudes, as well as adult status characteristics indicators (marital and employment status). Similar models were estimated focusing on victimization or 'any violence' as the dependent variable, and ordinary least squares (OLS) models explored a range of seriousness levels. Next we estimated models that included interactions of gender and each of the focal relationship variables. Finally, we included dummy variables indexing various combinations of control dynamics and anger, to explore whether, as predicted in the above discussion, anger and mutual control attempts are associated with especially high levels of risk for IPV. Our discussion of results includes some supplemental analyses not shown, and tables summarizing these results are available upon request.

## Results

Descriptive results included in Table 1 indicate that approximately 16% of the sample report IPV perpetration within the context of their current/most recent relationship. This includes 12.09% of males and 18.38% of female respondents. Table 2 presents the zero order associations between the focal variables (indices tapping anger and control), the traditional violence predictors, and other covariates. As shown in the first column, the zero order models indicate significant associations for each of the focal variables (respondent's control attempts, partner's control attempts, anger identity, relationship-based anger), and other traditional predictors. Of the traditional predictors assessed, witnessing parental violence, coercive parenting, residing in a disadvantaged neighborhood, and affiliation with violent peers (all wave 1 predictors) were significantly related to later IPV perpetration as reported at wave 5. Further, the respondent's initial (wave 1) self-report of delinquency and subsequent (wave 5) criminal involvement, and partner's (wave 5) criminal involvement

were significantly related to reports of IPV perpetration. Endorsement of traditional gender roles was not significant at the zero order.

Of the sociodemographic and other control variables, gender (female) was positively related to self-reports of IPV perpetration, as was single parent or 'other' household family background relative to two-parent family background. Mother's education (less than high school) was related to higher risk, while having a mother with college or greater was associated with reduced odds. Among the adult status characteristics, being employed part-time or full-time were also related at the zero order in the expected directions. Having one or more children was associated with higher odds of IPV perpetration. Finally, respondents who were cohabiting, relative to dating, and those in longer relationships were also significantly more likely to report IPV perpetration.

Model 2 presents results of a logistic regression model that includes traditional predictors and other covariates. In this model, witnessing parental violence, parental coercion, and the respondent and partner's criminal involvement remained significant predictors. Model 3 introduced the variable indexing respondent control attempts. Results indicated that higher levels of respondent control were associated with greater odds of IPV perpetration. Model 4 added the measure of partner control, which was also significantly related to IPV, and contributed to model fit. Results were thus consistent with our hypothesis that both respondent and partner control attempts are significantly related to IPV perpetration, after taking into account traditional violence predictors and other relevant covariates.<sup>3</sup> In Model 4, of the traditional predictors, only witnessing parental violence and partner's criminal involvement remained significantly related to perpetration. Parental coercion was no longer significant, which suggests that some of the effects of parental coercion are indirect, through an increased likelihood of being in relationships characterized by higher levels of control, as well as greater likelihood of involvement with an antisocial partner. Model 5 adds the two anger indices. Results revealed that both forms of anger were significantly associated with IPV perpetration, net of the other covariates, including respondent and partner control. Adding the anger indices contributed to model fit, when contrasted with models including only the traditional predictors and measures of control attempts. These results suggest that, consistent with our hypothesis, both anger and control processes are significantly related to self-reports of IPV perpetration. In addition, that relationship-based anger was significantly tied to IPV net of the "characterological" measure (i.e., anger identity) supports the interactionist perspective on the situated nature of emotional experiences.

To determine whether gender influences the significant associations described above, we also estimated a series of interactions. These interactions were not significant, indicating that both male and female respondents' reports about control dynamics are similarly linked with self-reports of IPV perpetration. We also found that both dimensions of anger assessed are similarly associated with IPV perpetration for male and female respondents. The lack of gender interactions across multiple predictors, including the relationship dynamics and anger

<sup>&</sup>lt;sup>3</sup>Supplemental multivariate models were tested that specify gender (i.e., combining female reports about their own control attempts and male respondents" reports about their female partners to create an index of "female control"; using a similar strategy to create an index of male control), and we observed similar findings. In these models, both male and female control attempts were related to higher odds of IPV perpetration (results not shown).

indices, suggests that some processes may operate similarly across gender as influences on violent actions within the relationship. Supplemental analyses indicated that results shown in Table 3 and those including gender interactions are similar when models were estimated focusing on victimization rather than perpetration, a composite index that reflects "any violence" (whether as perpetrator, victim, or both) or in OLS models, on variations in the severity of violence.

The results of other supplemental analyses showed similar effects across gender in the influence of the traditional violence predictors on IPV. While not the primary focus of our analyses, these findings are potentially important as they indicate that each of these forms of early social exposure (witnessing parental violence, coercive parents, residing in a disadvantaged neighborhood, and affiliation with violent peers) is similarly linked to variations in female and male respondents' reports of IPV perpetration. In addition, interactions of gender and the individual's own and partner's criminal involvement were not significant, suggesting the general importance of taking into account the individual and partner's antisocial histories (Herrera et al., 2008).

The above findings suggest generally that controlling behaviors and anger are associated with IPV perpetration reported by male and female respondents. Yet the traditional variable-centered approach does not provide a window on how these factors combine within the life course experiences of particular individuals. Theoretically, we hypothesized that where both respondents and their partners are engaged in high levels of control attempts and respondents experience feelings of anger, this combination may pose a particularly high level of risk. We explore this notion more directly via analyses that include dummy variables indexing the various combinations.

As shown in Table 3, the combination of mutual control and higher than average scores on the composite anger index is associated with 1781% greater odds of violence as a contrast to individuals reporting lower levels of each of the control dimensions and lower agreement with the items comprising the anger index. Consistent with the interactionist perspective, these analyses controlled for variations in early exposure to violence and coercive parenting, suggesting the utility of including attention to more localized relationship and emotional processes. Further, in a model changing the reference category, results showed that anger with mutual control is tied to greater relationship violence relative to respondents who report mutual control but do not agree with the angry self-descriptions (results not shown). However, as the results of Table 3 reveal, other combinations of control and anger were also significantly associated with reports of violence. These results suggest that neither the ideal type emphasized in many theoretical discussions and prevention programs (high levels of partner control, limited attention to feelings of anger) nor our own emphasis here (mutual control attempts accompanied by anger) are comprehensive as portraits of all of the scenarios that may be linked to elevated IPV risk. Supplemental models examined interactions of these combinations with gender, and none of these interactions are statistically significant.

## **Discussion**

The results of our analyses indicate that emotional processes and relationship dynamics 'matter' for understanding variations in the likelihood of reporting IPV perpetration in a current/most recent relationship. Relying on a large, heterogeneous sample of young adult respondents, logistic regression analyses showed that higher levels of reported anger and respondent and partner control attempts were significantly related to greater odds of IPV. The supplemental analyses indicate that various combinations of control and anger were observed and linked to heightened risk, relative to relationships that were characterized by low anger and control. Such findings suggest the need to temper the general assertion that "it's not about anger," as well as to broaden the discussion of control attempts to include attention to women's as well as men's attempts to control the partner's behavior or aspects of the relationship.

These findings challenge some key emphases of traditional theoretical perspectives. The focus on relationship dynamics adds to prior treatments based on social learning arguments, which have necessarily emphasized what is brought into the relationship by virtue of early modeling/social exposure. And while traditional feminist theorizing has drawn attention to the unique dynamics involved in male-female relationships, the current findings add a layer of complexity to the prior emphasis on male controlling actions and the tendency to bracket off emotional processes. The interactionist perspective we relied upon as motivation for the analyses highlights the situated or 'grounded' nature of human behavior, particularly the role of relationship-specific processes. The current results show that reports of control attempts and anger (including relationship-based anger) are significantly associated with IPV, net of partner and respondent levels of criminal involvement and other relevant covariates (e.g., parental coercion). The interactionist lens and our findings highlight that one's background experiences or broad-based conceptions of gender role requirements are incomplete as guides to action.

A significant caveat about these results is that they may well be life-course specific, and relate directly to our focus on the relatively fluid dating and cohabiting relationships that characterize the young adult phase of the life course. We suggested that key transitions that often take place during this time (such as moving away from a heavy emphasis on peer socializing, becoming more seriously committed to a given partner, and solidifying career prospects) may become contested domains within relationships during this life course stage. The idea that issues of power and control tend to be localized around such contested terrain further situates control attempts within the period, and highlights concerns that are likely to be recognizable to the individuals involved. Some men's actions can best be understood in light of a generalized desire to dominate and control their partners, but others may be interested in control that relates to specific contested areas within the relationship. This situated approach also allows us to interpret the relatively high scores of young women on attempts to control their partners observed across the sample as a whole, and within relationships characterized by IPV. This emphasis on interactive elements within the relationship is thus consistent with a general interactionist perspective on interpersonal violence (Athens, 2005), but highlights that the specific locus of the conflict may vary—

based on unique concerns of different stages of the life course, the character of the relationship, as well as gendered socialization processes.

A limitation of the study is that reports about relationship characteristics, anger, and IPV were assessed contemporaneously. Thus, it is not possible to establish a precise causal order regarding processes that are undoubtedly reciprocally related. Although we posited a particular theoretical sequence, to an unknown degree control attempts and anger may follow from the experience of IPV. It would be useful in future research to experiment with methods that permit a more fine-grained assessment of sequencing (e.g., using diary methods, more frequent assessment periods). Future research could also examine other potentially important relationships in more detail, such as the association between coercive parenting and reports of control attempts, or negative cases for intergenerational theories (e.g., individuals who experience coercive parenting but do not develop an angry identity or experience feelings of anger in their own intimate relationships—see e.g., Stith et al., 2000).

As research on IPV has developed, researchers have noted differences in approach and findings based on population-based surveys as contrasted with targeted samples, such as those focused on victims in shelters and perpetrators identified by criminal justice agencies. However, our theoretical framework and findings may be useful in the development of prevention efforts whose objectives are to interrupt these processes before violence patterns become more firmly entrenched. In addition, the longitudinal lens will be useful in assessing whether these portraits reflect points in a sequence of relationship processes, rather than two discrete patterns or subgroups. Research designs that use common measurement across population-based and criminal justice or victim-services samples would serve to highlight similar and distinctive relationship processes observed across the full spectrum of IPV experiences.

In spite of these limitations, the current study provides a descriptive portrait that complicates traditional theorizing, and has implications for prevention and intervention efforts targeting IPV within younger populations. Curricula directed at young people may benefit from increased attention to the variability in relational processes that appear to be associated with heightened risk of experiencing IPV (Capaldi & Langhinrichsen-Rohling, 2012). Thus, prevention messages that ignore female partners' attempts to control their partners or aspects of the relationship may be limited to the extent that they lead women and men to dismiss prevention messages as not matching the realities of their own relationship circumstances. In addition, further connecting violence to feelings of vulnerability and a lack of control of specific contested domains may serve to construct more uniformly negative meaning(s) around the resort to violence within the context of one's intimate relationships.

It may also be useful to bring anger and other emotions into such discussions, even while delivering messages that clearly communicate that emotions in themselves do not "cause" or excuse injurious actions. Recognizing that there are areas of overlap across gender in emotional processes and relationship dynamics associated with the use of violence could be a springboard for subsequently highlighting uniquely gendered features and consequences (feelings of fear; injury; emotional distress).

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#### References

- Anderson KL. Theorizing gender in intimate partner violence research. Sex Roles. 2005; 52:853-865.
- Agnew R, Brezina T, Wright JP, Cullen FT. Strain, personality traits, and delinquency: Extending general strain theory. Criminology. 2002; 40(1):43–72.
- Archer J. Sex differences in aggression between heterosexual partners: A meta-analytic review. Psychological Bulletin. 2000; 126(5):651–680. [PubMed: 10989615]
- Arnett, JJ. Emerging adulthood: The winding road from the late teens through the twenties. England: Oxford University Press; 2004.
- Athens L. Violent encounters: Violent engagements, skirmishes, and tiffs. Journal of Contemporary Ethnography. 2005; 34:631–678.
- Bancroft, L.; Silverman, J. The batterer as parent. Thousand Oaks, CA: Sage; 2002.
- Bartholomew, K.; Cobb, RJ. Conceptualizing relationship violence as a dyadic process. In: Horowitz, L.; Strack, S., editors. Handbook of interpersonal psychology: Theory, research, assessment, and therapeutic interventions. Hoboken, NJ: John Wiley & Sons; 2010. p. 233-248.
- Bell JM, Naugle AE. Intimate partner violence theoretical considerations: Moving towards a contextual framework. Clinical Psychology Review. 2008; 28(7):1096–1107. [PubMed: 18430501]
- Boonzaier F. 'If the man says you must sit, then you must sit': The relational construction of woman abuse: gender, subjectivity and violence. Feminism and Psychology. 2008; 18(2):183–206.
- Capaldi DM, Kim HK, Shortt JW. Observed initiation and reciprocity of physical aggression in young, at-risk couples. Journal of Family Violence. 2007; 22:101–111. [PubMed: 17468783]
- Capaldi DM, Knoble NB, Shortt JW, Kim HK. A systematic review of risk factors for intimate partner violence. Partner Abuse. 2012; 3(2):231–280. [PubMed: 22754606]
- Capaldi DM, Langhinrichsen-Rohling J. Informing intimate partner violence prevention efforts: Dyadic, developmental, and contextual considerations. Prevention Science. 2012; 13:323–328. [PubMed: 22744890]
- Capaldi DM, Shortt JW, Crosby L. Physical and psychological aggression in at-risk young couples: Stability and change in young adulthood. Merrill-Palmer Quarterly. 2003; 49:1–27.
- Catalano, S. Intimate partner violence in the United States. Washington, DC: Bureau of Justice Statistics; 2012.
- Coleman DH, Straus MA. Marital power, conflict, and violence in a nationally representative sample of American couples. Violence and Victims. 1986; 1(2):141–157. [PubMed: 3154145]
- Cui M, Ueno K, Gordon M, Fincham FD. The continuation of intimate partner violence from adolescence to young adulthood. Journal of Marriage and Family. 2013; 75:300–313. [PubMed: 23687386]
- del Barrio V, Aluja A, Spielberger C. Anger assessment with the STAXI-CA: Psychometric properties of a new instrument for children and adolescents. Personality and Individual Differences. 2004; 37(2):227–244.
- Dobash, RE.; Dobash, R. Violence against wives: A case against the patriarchy. New York, NY: Free Press; 1979.
- Dutton DG. Trauma symptoms and PTSD-like profiles in perpetrators of intimate abuse. Journal of Traumatic Stress. 1995; 8(2):299–316. [PubMed: 7627445]

Eckhardt CI, Samper RE, Murphy CM. Anger disturbances among perpetrators of intimate partner violence: Clinical characteristics and outcomes of court-mandated treatment. Journal of Interpersonal Violence. 2008; 23:1600–1617. [PubMed: 18378815]

- Elliott DS, Ageton SS. Reconciling race and class differences in self-reported and official estimates of delinquency. American Sociological Review. 1980; 45(1):95–110.
- Engdahl, E. Ph.D. dissertation. Department of Sociology Örebro University; Örebro, Sweden: 2004. A theory of the emotional self: From the standpoint of a neo-Meadian.
- Felson, RB. Violence and gender reexamined. Washington, DC: American Psychological Association; 2002.
- Felson RB, Lane KJ. Does violence involving women and intimate partners have a special etiology? Criminology. 2010; 48(1):321–338.
- Felson RB, Outlaw MC. The control motive and marital violence. Violence and Victims. 2007; 22(4): 387–407. [PubMed: 17691548]
- Follingstad DR, Wright S, Lloyd S, Sebastian JA. Sex differences in motivations and effects in dating violence. Family Relations. 1991; 40:51–57.
- Ford K, Sohn W, Lepkowski J. American adolescents: Sexual mixing patterns, bridge partners, and concurrency. Journal of the American Sexually Transmitted Diseases Association. 2002; 29:13– 19.
- Gilligan, C. In a different voice: Psychological theory and women's development. Cambridge, MA: Harvard University Press; 1982.
- Giordano PC, Soto DA, Manning WD, Longmore MA. The characteristics of romantic relationships associated with teen dating violence. Social Science Research. 2010; 39(6):863–874. [PubMed: 21037934]
- Gomez AM. Testing the cycle of violence hypothesis: Child abuse and adolescent dating violence as predictors of intimate partner violence in young adulthood. Youth and Society. 2011; 43:171–192.
- Gondolf EW, Russell D. The case against anger control treatment programs for batterers. Response. 1986; 9(3):2–5.
- Herrera VM, Wiersma JD, Cleveland HH. The influence of individual and partner characteristics on the perpetration of intimate partner violence in young adulthood relationships. Journal of Youth and Adolescence. 2008; 37:284–296.
- Hettrich EL, O'Leary KD. Females' reasons for their physical aggression in dating relationships. Journal of Interpersonal Violence. 2007; 22(9):1131–1143. [PubMed: 17704459]
- Holtzworth-Munroe A. Male versus female intimate partner violence: Putting controversial findings into context. Journal of Marriage and family. 2005; 67(5):1120–1125.
- Hotaling GT, Sugarman DB. An analysis of risk markers in husband to wife violence: The current state of knowledge. Violence and Victims. 1986; 1(2):101–124. [PubMed: 3154143]
- Jackson SM. Issues in the dating violence research: A review of the literature. Aggression and Violent Behavior. 1999; 4(2):233–247.
- Komter A. Hidden power in marriage. Gender and Society. 1989; 3:187-216.
- Langer, A.; Lawrence, E. Toward an integrated, empirically supported theory of intimate partner violence. In: Osterman, K., editor. Indirect and direct aggression. New York, NY: Peter Lang Printing House; 2010. p. 357-374.
- Larkin J, Popaleni K. Heterosexual courtship violence and sexual harassment: The private and public control of young women. Feminism and Psychology. 1994; 4(2):213–227.
- Lively KJ, Heise DR. Sociological realms of emotional experience. American Journal of Sociology. 2004; 109(5):1109–1136.
- Lupton, D. The emotional self: A sociocultural exploration. London: Sage Publications; 1998.
- Lussier P, Farrington DP, Moffitt TE. Is the antisocial child father of the abusive man?: A 40-year prospective longitudinal study of the developmental antecedents of intimate partner violence. Criminology. 2009; 47(3):741–780.
- Maiuro RD, Eberle JA. State standards for domestic violence perpetrators treatment: Current Status, trends, and recommendations. Violence and Victims. 2008; 23(2):133–155. [PubMed: 18624086]

Mead, GH. Mind, self, and society from the standpoint of a social behaviorist. Chicago, IL: University of Chicago Press; 1934.

- Mihalic SW, Elliott D. A social learning theory model of marital violence. Journal of Family Violence. 1997; 12(1):21–47.
- Miller J, White NA. Gender and adolescent relationship violence: A contextual examination. Criminology. 2003; 41:1501–1541.
- Moffitt TE, Krueger RF, Caspi A, Fagan J. Partner abuse and general crime: How are they the same? How are they different? Criminology. 2000; 38(1):199–232.
- Moffitt TE, Robins RW, Caspi A. A couples analysis of partner abuse with implications for abuse-prevention policy. Criminology and Public Policy. 2001; 1:5–36.
- Murphy CM, O'Leary KD. Psychological aggression predicts physical aggression in early marriage. Journal of Consulting and Clinical Psychology. 1989; 57(5):579–582. [PubMed: 2794178]
- Nemeth JM, Bonomi AE, Lee MA, Ludwin JM. Sexual infidelity as trigger for intimate partner violence. Journal of Women's Health. 2012; 21(9):942–949.
- O'Donnell L, Stueve A, Myint-U A, Duran R, Agronick G, Wilson-Simmons R. Middle school aggression and subsequent intimate partner physical violence. Journal of Youth and Adolescence. 2006; 35:693–703.
- Pence, E.; Paymar, M. Education groups for men who batter: The Duluth Model. New York, NY: Springer; 2006.
- Rennison CM. Intimate partner violence and age of victim, 1993-1999. Bureau of Justice Statistics Report. 2001 Retrieved July 23, 2012.
- Schumacher JA, Leonard KE. Husbands' and wives' marital adjustment, verbal aggression, and physical aggression as longitudinal predictors of physical aggression in early marriage. Journal of Consulting and Clinical Psychology. 2005; 73(1):28–37. [PubMed: 15709829]
- Seeburger, FF. Blind side and brute feeling: The divorce of cognition from emotion. In: Gecas, V.; Frank, DD., editors. Social perspective on the emotions. Greenwich, CT: JAI Press; 1992. p. 47-60.
- Settersten, RA.; Ray, B. Not quite adults: Why 20-somethings are choosing a sower path to adulthood, and why it's good for everyone. New York: Random House; 2010.
- Shook NJ, Gerrity DA, Jurich J, Segrist AE. Courtship violence among college students: A comparison of verbally and physically abusive couples. Journal of Family Violence. 2000; 15(1):1–22.
- Simons RL, Lin K, Gordon LC. Socialization in the family of origin and male dating violence: a prospective study. Journal of Marriage and the Family. 1988; 60:467–478.
- Smith CA, Ireland TO, Park A, Elwyn L, Thornberry TP. Intergenerational continuities and discontinuities in intimate partner violence: A two-generational prospective study. Journal of Interpersonal Violence. 2011; 26(18):3720–3752. [PubMed: 21810795]
- Smith P, White J, Moracco K. Becoming who we are: A theoretical explanation of gendered social networks that shape adolescent interpersonal aggression. Psychology of Women Quarterly. 2009; 33:25–29.
- Spielberger, CD. Manual for the State-Trait Anger Expression Inventory. Odessa, FL: Psychological Assessment Resources; 1988.
- Stets JE. Interactive processes in dating aggression: A national study. Journal of Marriage and the Family. 1992; 54:165–177.
- Stets JE. Control in dating relationships. Journal of Marriage and Family. 1993; 55:673–685.
- Stets JE, Hammons SA. Gender, control, and marital commitment. Journal of Family Issues. 2002; 23:3–25.
- Stets JE, Pirog-Good M. Interpersonal control and courtship aggression. Journal of Social and Personal Relationships. 1990; 7:371–394.
- Stith SM, Rosen KH, Middleton KA, Busch AL, Lundeberg K, Carlton RP. The intergenerational transmission of spouse abuse: A meta-analysis. Journal of Marriage and Family. 2000; 62:640–654
- Straus MA, Gozjolko KL. "Intimate terrorism" and gender differences in injury of dating partners by male and female university students". Journal of Family Violence. 2014; 29:51–65.

Straus MA, Hamby SL, Boney-McCoy S, Sugarman DB. The revised conflict tactics scales (CTS2). Journal of Family Issues. 1996; 17:283–316.

- Swan SC, Gambone LJ, Fields AM, Sullivan TP, Snow DL. Women who use violence in intimate relationships: The role of anger, victimization, and symptoms of posttraumatic stress and depression. Violence and Victims. 2005; 20:267–285. [PubMed: 16180367]
- Sweeten G. Scaling criminal offending. Journal of Quantitative Criminology. 2012; 28:533–557.
- Theobald D, Farrington DP. Child and adolescent predictors of male intimate partner violence. Journal of Child Psychology and Psychiatry. 2012; 53(12):1242–1249. [PubMed: 22757666]
- Winstok Z. Toward an interactional perspective on intimate partner violence. Aggression and Violent Behavior. 2007; 12(3):348–363.
- Wolf KA, Foshee VA. Family violence, anger expression styles, and adolescent dating violence. Journal of Family Violence. 2003; 18:309–316.

Table 1

Descriptive Statistics, by IPV Status (n = 928)

Dependent Variable	Means/Percentages	SD	SD Range	$\begin{aligned} & Perpetration \\ & (n = 144) \end{aligned}$		No Perpetration $(n = 784)$
Perpetration	15.52%			1		;
Independent Variables						
Control Dynamics						
Respondent control	1.67	09.0	1-5	2.25	* * *	1.56
Partner control	1.76	0.75	1-5	2.43	* * *	1.63
Anger						
Anger identity	2.26	0.70	1-5	2.71	* * *	2.17
Relationship-based anger	1.90	0.85	1-5	2.56	* * *	1.77
Gender Socialization						
Traditional gender roles	2.51	1.01	1-5	2.63		2.49
Traditional Predictors						
117	21.050			7002	**	701.0

						%	%									%	%	<b>-</b>		%
	2.17	1.77		2.49		25.51%	20.28%	1.70	1.50		1.28	1.74	1.89			47.32%	52.68%	25.44		70.03%
	* * *	* * *				* * *	* *	*	* * *		* * *	* * *	* * *				*			* * *
	2.71	2.56		2.63		62.50%	34.03%	2.48	1.92		1.80	2.22	2.87			35.42%	64.58%	25.33		52.78%
	1-5	1-5		1-5				0-10	1-10		0-10	0-10	0-10					22-29		
	0.70	0.85		1.01				2.79	1.27		2.06	1.51	1.73					1.83		
	2.26	1.90		2.51		31.25%	22.41%	1.82	1.57		1.36	1.81	2.04			45.47%	54.53%	25.42		67.35%
120	Anger identity	Relationship-based anger	Gender Socialization	Traditional gender roles	Traditional Predictors	Witnessing parental violence	Coercive parenting	Disadvantaged neighborhood	Violent peers	Respondent and Partner Characteristics	Respondent's delinquency (Wave 1)	Respondent's delinquency (Wave 5)	Partner's delinquency (Wave 5)	Sociodemographic Characteristics	Gender	(Male)	Female	Age	Race	(White)

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Black       21.34%         Hispanic       11.31%         Family Factors       3.45%         Family structure       21.01%         (Two biological parents)       53.45%         Single parent       11.96%         Other       11.96%         Mother's education       10.78%         (HS)       32.43%         Some college       33.41%         College or more       23.38%         Adult Status Characteristics       19.18%         Full-time       55.93%         (Unemployed)       24.89%         Parent       74.35%         Yes       25.65%         Relationship Characteristics       25.65%         Relationship status       44.40%         Married       23.28%			31.94% 15.28% 34.72% 32.64% 13.89% 18.75% 18.06% 34.02% 35.42%	* * * * * * * * * * * * * * * * * * *	19.39% 10.59% 18.88% 13.52% 10.71% 9.44%
			15.28% 32.64% 13.89% 18.75% 34.02% 35.42% 12.50%	* * * * * * * * * *	10.59% 56.89% 18.88% 13.52% 10.71% 9.44%
			34.72% 32.64% 13.89% 18.75% 18.06% 34.02% 35.42%	* * * * * * * * * *	56.89% 18.88% 13.52% 10.71% 9.44%
			34.72% 32.64% 13.89% 18.75% 34.02% 35.42% 12.50%	* * * * * * * * * * * *	56.89% 18.88% 13.52% 10.71% 9.44%
			34.72% 32.64% 13.89% 18.75% 18.06% 34.02% 35.42% 12.50%	* * * * * * * * * *	56.89% 18.88% 13.52% 10.71% 9.44% 32.14%
			32.64% 13.89% 18.75% 18.06% 34.02% 35.42% 12.50%	* * * * * * *	18.88% 13.52% 10.71% 9.44% 32.14%
			13.89% 18.75% 18.06% 34.02% 35.42% 12.50%	* * *	13.52% 10.71% 9.44% 32.14%
			18.75% 18.06% 34.02% 35.42% 12.50%	* * *	10.71% 9.44% 32.14%
			18.06% 34.02% 35.42% 12.50%	* *	9.44%
			18.06% 34.02% 35.42% 12.50%	* *	9.44%
			34.02% 35.42% 12.50%		32.14%
			35.42% 12.50%		
			12.50%		33.04%
				* * *	25.38%
			20.14%		19.01%
			36.11%	* * *	59.57%
			43.75%	* * *	21.42%
			57.64%		77.42%
			42.36%	* * *	22.58%
			34.72%	*	46.17%
			22.92%		23.34%
Cohabiting 32.33%			42.36%	*	30.48%
Current relationship 79.96%			79.86%		79.97%
(Most recent relationship) 20.04%			20.14%		20.03%
Duration 7.15	1.30	1-8	7.50	* *	7.08

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\*\*
p < .01;

\*\*\*
p < .001
Source: Toledo Adolescent Relationships Study

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 $\mbox{Table 2} \label{eq:Table 2} \mbox{Odds Ratios for the Association between Control, Anger, IPV, and Reports of Perpetration <math display="inline">(n=928)$ 

	Zero Order	Model 2	Model 3	Model 4	Model 5
Control Dynamics					
Respondent control	6.014***		4.974***	3.638***	3.181***
Partner control	3.314***			2.166***	1.548*
Anger					
Anger identity	3.097***				1.561*
Relationship-based anger	2.741 ***				1.908
Gender Socialization					
Traditional gender roles	1.143	1.132	1.014	0.989	1.034
Traditional Predictors					
Witnessing parental violence	4.867***	3.974***	3.738***	3.455***	3.742***
Coercive parenting	2.027***	1.676*	1.338	1.277	1.290
Disadvantaged neighborhood	1.093**	0.986	1.004	1.003	1.007
Violent peers	1.220***	1.149	1.187*	1.197*	1.136
Respondent and Partner Characteristics					
Respondent's delinquency (Wave 1)	1.110**	1.043	1.022	1.025	1.016
Respondent's delinquency (Wave 5)	1.191	1.156**	1.045	1.053	1.026
Partner's delinquency (Wave 5)	1.282***	1.195***	1.159**	1.127*	1.132*
Sociodemographic Characteristics					
Gender					
(Male)					
Female	1.638**	1.739*	1.902*	2.491***	2.493**
Age	0.966	0.962	1.003	1.006	1.010
Race					
(White)					
Black	2.186***	1.031	0.724	0.723	0.619
Hispanic	1 915*	1.010	0.870	0.860	0.905

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Model 5 0.327\*\* 1.019 1.991\* 1.327 0.6831.470 0.833 0.888 1.011 1.583 1.181 0.322\*\*\* 282.85 \*\*\* Model 4 0.437\*1.388\* 0.716 1.000 1.469 1.365 0.861 0.822 1.143 0.890 1.400 1.404 259.85\*\*\* 0.316\*\*\* Model 3  $0.437^{*}$ 1.440\* 1.176 1.542 1.515 0.933 1.082 0.952 0.741 0.832 1.494 1.006 180.76\*\*\* 1.633\*\*\* 0.384\*\*\* Model 2 1.761\* 0.791 1.582 1.055 1.117 0.605 1.327 1.073 1.329 0.790 Zero Order 2.833 2.520\*\*\* 2.867\*\*\* 0.297\*\*\* 0.519\*\* 1.848\*\* 0.465\*\* 1.683  $1.807^{*}$ 1.013 1.306 0.993 (Two biological parents) Relationship Characteristics (Most recent relationship) Adult Status Characteristics Current relationship College or more Employment Status Relationship status Family structure Mother's education Some college (Unemployed) Less than HS Single parent Step-parent Cohabiting Full-time Family Factors Part-time Married (Dating) Other Duration Yes (No) Parent Model  $\chi^2$ 

\* p < .05;

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$$\begin{array}{c} ** \\ p < .01; \\ *** \\ p < .001 \end{array}$$

Table 3 The Association Between Specific Combinations of Anger and Controlling Behaviors and Reports of IPV Perpetration  $(n=928)^a$ 

	Model 1	Model 2
Angry, both control	31.547***	18.813***
Not angry, both control	9.876***	9.205***
Angry, respondent control	13.168***	11.251***
Not angry, respondent control	10.036***	7.931***
Angry, partner control	15.545***	14.472***
Not angry, partner control	3.717**	3.216*
Angry, neither control	5.359***	5.045***
(Not angry, neither control)		
Model χ <sup>2</sup>	167.76***	271.85***

<sup>\*</sup> p < .05;

p < .01;

<sup>\*\*\*</sup> p < .001

 $<sup>^{</sup>a}$ Model 2 includes controls for gender socialization, traditional violence predictors, early and current delinquency/criminal involvement and current partner's criminal involvement, sociodemographic characteristics, family factors, adult status characteristics, and relationship characteristics.