Purpose

Conduct an intensive observational longitudinal study of 200 New York City 14- to 18-year-old dating couples, organized around four overarching questions. Question #1: Are maladaptive interaction patterns in teen dating relationships associated with TDV? Question #2: Do the same maladaptive interaction patterns that predict current TDV (from Question 1) predict *future* TDV? Question #3: Do the effects of maladaptive interaction patterns on TDV transcend the relationship in which they were observed? Question #4: Do risk factors (e.g., antisociality, family violence) identified in prior research explain TDV via their impact on maladaptive interaction patterns?

Method

Participants

A total of two hundred and nine adolescent couples ($N = 418$ participants) participated. Couples in which (1) both members were 14-18 years old, and had (2) not yet begun college, and who were (3) dating for ≥3 months and (4) reported current relationship conflict were eligible to participate. Each couple could receive a total of $250 dollars for completing the study assessments over the course of 12 months.

Participants were recruited via numerous strategies. The main method of recruitment involved sending research staff to stand near public, charter, and private schools, as well as public spaces (i.e., shopping areas, fast food restaurants, and businesses popular with adolescents) in New York City and adjacent areas in New Jersey (e.g., Jersey City). Volunteer recruiters explained the study to interested adolescents and distributed business cards with contact information. On initiating contact, adolescents were screened for eligibility, and parental permission was verbally obtained for adolescents under the age of 18. Additional methods of

recruitment included posting flyers in public spaces with study information, referral sampling (where existing study participants inform acquaintances via word of mouth, social media, etc.) and recruiters visiting schools to provide oral presentations and contact information to classrooms.

The mean age of study participants was 17.1 years old (*SD* = 1.0). Among participants, 48.1% identified as Latino or Hispanic of any race. Non-Latino participants described themselves as African American (19.9%), Asian (10.2%), White (19.7%), Native Hawaiian or Other Pacific Islander (0.9%), Mixed Race (2.4%), or Other/Don't Know (3.8%). Of the sample, 52.6% of participants identified as Female, 46.7% as Male, 0.4% as Transgendered, and 0.4% Other. Additionally, 79.2% of participants identified as Heterosexual, 5.7% identified as Homosexual/Lesbian/Gay/Queer, 11.9% identified as Bisexual, and 3.1% were “not sure.” Twent- three of the couples were same sex (*n* = 18 female-female; *n* = 5 male-male). The mean length of the relationship was 17.2 months (*SD* = 11.9).

Procedure

Each couple made a 3-hour laboratory visit at the study outset, and was asked to complete 12 monthly follow-up questionnaires online.

Laboratory visit. The laboratory visit consisted of a verbal/written consent procedure, brief relationship history interview, a questionnaire battery, approximately one hour of behavior observation, and a debriefing.

Relationship history interview. The video recorded relationship history interview was used as a warm-up task and to obtain information that could be used to link participants across time, in lieu of personally identifying information.

Questionnaire battery. Questionnaires were individually administered to each member of the couple in separate rooms, to ensure privacy and prevent collaboration. The individual measures are described in the Measures section below.

Behavior observation. The video recorded behavior observation protocol involved six tasks, totaling approximately one hour of observation; four were adapted from prior research on adolescent couples, and two were novel. The tasks were designed with consultation from teen relationship researchers to elicit range in conflict behaviors. Tasks 1 and 6 were always administered first (warm-up) and last (cool-down), respectively.

(1) *Party Planning task* (5 minutes; Capaldi et al., 2007). This task was administered first to allow for a warm-up period. Participants are asked to plan a hypothetical party together within an unlimited spending limit.

(2) *General Dating Issues task* (7 minutes; Capaldi et al., 2007). the couple discusses what they think is important in dating relationships and what they think makes for good and poor relationships. An accompanied sheet of prompts (e.g., "What are the top 5 most important things in a dating relationship? Try to come to an agreement about the order; which is #1, #2, etc.") assists in guiding the conversation.

(3) *Problem Solving task* (≤ 20 minutes). In this task, couples were asked to discuss issues of unresolved conflict in their relationships. It is a version of what has become the most common task in adolescent and adult couple conflict research (e.g., Capaldi et al., 2007). Each partner separately completed a 25-item checklist (see Conversation Assessment Tool-Adolescent below) of common issues in adolescent relationships (e.g., listening or understanding each other) to determine personally relevant problems for discussion. For each selected issue, the participant was also asked to rate the importance of their partner making a change (on a 6-point scale; "not

at all important" to "very important"). Research staff then selected the 3 issues per partner that were rated highest in importance and asked the couple to attempt to resolve them (10 minutes per partner; order counterbalanced).

(4) *Lego task (10 minute*s). Influenced in part by the group dynamics protocol of West et al. (2012), each couple was asked to build an intricate, pre-designated Lego model to assemble from a diagram on the other side of the room in an unrealistically short amount of time. An image of a Lego diagram from multiple angles is taped to a remote table. The couple is instructed that the diagram must remain on the table and that only one partner can walk up to the diagram at a time. To encourage collaborative participation, each member was asked to keep one arm behind her/his back while working with the Lego pieces. To motivate competition, a $5 incentive is promised to the person who does the "best job" (although the $5 are given to both members of each couple at the end of the laboratory visit irrespective of performance). To add pressure, an audio recording of a ticking clock plays continuously, punctuated by minute-by-minute reminders of the remaining time. To further motivate the couple, they are told that most couples are able to complete the design in 6-7 minutes, but they have 10 minutes to complete it (insinuating that they should be able to complete the design).

(5) *Tangram task* (10 minutes). In a novel task, the couple was asked to collaboratively solve a puzzle in which geometric shapes (e.g., triangles) are arranged to match figures depicted in a diagram (e.g., a swan). The task is divided into two 5-minute segments, counterbalanced by gender, with each person taking turns at being the "teacher" and the "builder." The teacher holds the diagram and must instruct the builder in how to build each figure without pointing at or touching the puzzle pieces. The builder must assemble the puzzle solely from the teacher's instructions; s/he is not allowed to view the diagram. To add pressure, the couple is told that

most people can complete 2 to 3 puzzles per turn. Additionally, an audio recording of a ticking clock plays continuously, punctuated by minute-by-minute reminders of the remaining time. To further motivate the couple, an additional $5 incentive was offered if they can correctly complete two designs in each 5-minute session (although the incentive is given to all couples, irrespective of performance, at the end of the laboratory visit).

(6) *Enjoyable Memories task* (5 minutes; Capaldi et al., 2007). The couple is asked to discuss good times in their relationship. This task is always last, in order to allow for a cool-down period.

Debriefing. At the end of the laboratory visit, the couple was debriefed about the deception involved in the Lego and Tangram tasks (i.e., that the tasks are not as easy to solve as we led them to believe and that the "bonuses" would be paid regardless of task performance). They were also given information about healthy relationships and resources and paid in cash.

Follow-up assessments. Each member of the couple is asked to individually complete 12 monthly questionnaires online, beginning one month after the laboratory assessment[1]. We are presently in the midst of collecting these data. Participants are asked to complete the follow-up assessments whether or not they are still dating the partner with whom they completed the laboratory assessment. Multiple text, telephone, and e-mail reminders were sent to facilitate timely completion of the online assessments. Given their frequency, each participant was given a 3-week window in which to complete each of the first 11 online assessments. To increase the amount of longitudinal data that was available, this window was extended to 3 months for the final assessment. Participants were paid via cash pick-up or via electronic gift cards to various retailers (e.g., Starbucks; Amazon; Best Buy; CVS; iTunes).

[1] The study is an addition to an NICHD-funded investigation (1 R21 HD077345). The first 30 couples in the study were run through the NICHD protocol, which only included a single follow-up assessment at 3 months.

Measures

Questionnaires. The questionnaires administered at the laboratory assessment are listed in Table 1. The online follow-up assessments included abbreviated versions of the Safe Dates and CADRI dating aggression measures, as well as NRI-SPV Conflict and Antagonism subscales, FBS-V, SF-MJS, and PROMIS Pediatric Depression and Anger short forms. We also assessed the current status of each couple's relationship (e.g., intact vs. terminated).

Observational coding. Couple behavior was rated with three different systems, with separate teams per system.

Rapid Marital Interaction Coding System Generation — Revised (RMICS2). All observational tasks were coded with a revised version of the RMICS (Heyman, 2004). Behavior was coded in continuous 5-second intervals as belonging to one of 7 categories (e.g., hostility, constructive problem discussion, and positivity).

Demand-Withdraw Coding System (DWCS). The DWCS is a new measure, based heavily on the demand-withdraw codes from the Couples Interaction Ratings System 2 (CIRS2; Heavey, Gill, & Christensen, 2002) and from Mitnick et al. (2009). It is a frequency-based measure in which coders count the number of times each of several behaviors occur (e.g., pressure for change, avoidance/minimization, withdrawal). DWCS coding was limited to the general dating and problem solving tasks, given the relevance of the tasks and target behaviors.

Dominance Process Code (DPC). The DPC is a new measure based on descriptions of dominance behavior by Ostrov and Collins (2007). It the DPC, coders count the occurrence of 9 nonverbal and paraverbal dominance behaviors (e.g., resource control; controlling contact).

Analytic Method

Overview. Path analyses were conducted using Mplus Version 8 software (Muthén & Muthén, 1998-2017). The individual was the unit of analysis, with nesting of individuals within couples handled via sandwich estimator ("type = complex"), and missing data and nonnormality handled via the robust full information maximum likelihood method (MLR). Predictors were winsorized (Wilcox, 2005) to reduce the influence of outliers. All analyses were conducted with standardized variables, so that raw regression coefficients (*B*) can be interpreted as standardized (β). In addition to the principal regression paths described below, covariances (a) among residual terms, and (b) among exogenous variables were included in each model.

Descriptive statistics. We first report on the prevalence of physical and psychological aggression, followed by the means and standard deviations for the number of conflicts and negative and positive behavior during hot tasks and the cool-down task, as defined below.

Conflict recovery.

Hypotheses. We hypothesized that poorer conflict recovery would be positively associated with physical and psychological aggression.

Operationalizations. Dual-informant psychological and physical aggression scores were the maxima of a person's reports of perpetration and the partner's reports of victimization. We used multiple operationalizations of recovery from conflict. Observational tasks were arranged into two phases of interaction: *hot tasks* (General Dating, Problem Solving, Tangram, and Lego tasks) and *cool-down task* (Enjoyable Memories task). The mean percent of intervals in which a participant was *positive* (comprising the low- and high-intensity positivity, as well as constructive problem discussion/solution, RMICS2 codes) and *negative* (comprising the low- and high-intensity hostility, as well as dysphoric affect and withdrawal, RMICS2 codes) were computed for the hot and cool-down tasks. *Negative and positive behavior change* scores were

calculated by subtracting the hot task from cool-down task means for each respective variable (e.g., negativity during cool-down tasks minus negativity during hot tasks). Additionally, *relative negativity and positivity scores* were calculated by dividing cool-down task by hot task positivity and negativity, respectively (e.g., positivity during cool-down task divided by positivity during hot tasks). $N = 418$ for all models.

Bivariate effects of cool-down task behavior models. To test the bivariate associations of cool-down task behavior and aggression, we first jointly regressed physical and psychological aggression on cool-down task negativity (Model 1.1) and positivity (Model 1.2).

Unique effects of cool down-task behavior models. Given the strong possibility of carryover effects in which cool-down task behavior reflects a continuation of behavior from the hot tasks, we next tested the extent to which cool-down task behavior predicted aggression controlling for hot task behavior. We jointly regressed physical and psychological aggression on cool-down and hot tasks negativity (Model 2.1) and positivity (Model 2.2).

Interaction of cool-down and hot task behavior models. As an additional operationalization of conflict recovery, we next estimated cool-down × hot task behavior interactions in relation to aggression. A conflict recovery effect would be reflected, for example, by a pattern in which the associations of hot task negativity and aggression is attenuated at lower levels of cool-down task negativity. In such a case, hot tasks negativity is less destructive if a person is able to cool down more effectively. Similarly, the effect of low levels of positivity during conflict may be neutralized to the extent to which a person is able to become more positive during conflict recovery. We jointly regressed physical and psychological aggression on hot tasks negativity, cool-down task negativity, and hot task × cool-down task negativity (Model 3.1), and on hot tasks positivity, cool-down task positivity, and hot task × cool-down task positivity (Model 3.2).

Significant interactions were plotted at the 20th and 80th percentiles of hot task and cool-down task behavior, accompanied by simple slopes.

Hot to cool-down task change models. As an additional way to statistically model recovery effects, we jointly regressed physical and psychological aggression on negative behavior change, controlling for hot tasks negative behavior (Model 4.1) and on positive behavior change, controlling for hot tasks positive behavior (Model 4.2).

*Cool-down relative to hot task behavior models***.** As a final way to statistically model recovery effects, we jointly regressed physical and psychological aggression on relative negativity (Model 5.1) and positivity (Model 5.2) scores.

Coercion.

Hypotheses. We hypothesized that negative reinforcement of a person's hostile behavior via conflict termination would be positively associated both with the person's overall balance of hostile vs. nonhostile behavior in conflict, as well as their physical and psychological aggression. We further hypothesized that a person's tendency to reciprocate her/his partner's hostile behavior during conflict would be positively associated with their physical and psychological aggression.

Operationalizations. Coercion analyses were restricted to conflict bouts. Conflict bout beginnings were defined as simultaneous hostility and/or reciprocated hostility from one interval to the next (RMICS2 codes: low- and high-intensity hostility). Conflict bout ends were defined as having occurred in the last interval prior to a 20-second (i.e., 4 interval) period in which neither partner was hostile. Several variables were calculated. The *hostile-nonhostile ratio* was computed by dividing the number of hostile intervals by the number of nonhostile intervals. Nonhostile behaviors included the RMICS2 codes of low- and high-intensity positivity and constructive problem discussion). Negative reinforcement and negative reciprocity variables

were constructed via sequential analysis. *Negative reinforcement* was calculated as the log odds ratio (Bakeman & Quera, 2011) of the relative proportion by which hostile vs. nonhostile behaviors of the person at time *t*-1 (antecedent) resulted in the conflict ending vs. continuing at time *t* (consequent). High scores indicate that hostile behaviors are more likely than nonhostile behaviors to be negatively reinforced via conflict termination. Negative reciprocity was calculated as Wampold's kappa (Heyman, Lorber, Eddy, & West, 2014) for the conditional probability that a partner's hostile behavior at time *t*-1 (antecedent) was reciprocated vs. not reciprocated by the person at time *t* (consequent). High scores indicate that a person tends to reciprocate her/his partner's hostile behavior. All analyses involving sequential variables were restricted to cases in which the mean length of conflicts was at least 3 intervals (15 seconds); short conflict bouts result in sparsely populated contingency matrices and thus increase measurement error.

Coercion models. Three models were estimated. In the first model, the hostile-nonhostile ratio was regressed on negative reinforcement of the person's hostility (Model 6.1; $N = 200$). In the second and third models, physical and psychological aggression were jointly regressed on negative reinforcement of the person's hostility (Model 6.2; $N = 362$) and negative reciprocity by the person (Model 6.3; $N = 366$).

Results

Descriptive Statistics

Analyzed at the level of the individual, the prevalence of physical aggression was 58.4%; by contrast psychological aggression was nearly ubiquitous at 97.1%. The mean number of conflict bouts per couple was 6.70 ($SD = 5.33$). The mean percent of intervals coded as negative was 8.67 ($SD = 8.25$) during hot tasks and 3.45 ($SD = 7.56$) during the cool-down task. The mean

percent of intervals coded as positive was 73.36 (*SD* = 9.60) during hot tasks and 76.28 (*SD* = 14.11) during the cool-down task.

Conflict Recovery

Bivariate effects of cool-down task behavior. In Model 1.1, cool-down task negativity was positively associated with physical (*B* = 0.293, *SE* = 0.085, *p* = .001, 95% CI: 0.153, 0.512) and psychological (*B* = 0.146, *SE* = 0.064, *p* = .021, 95% CI: 0.042, 0.310) aggression.

In Model 1.2, cool-down task positivity was negatively associated with physical (*B* = -0.186, *SE* = 0.075, *p* = .013, 95% CI: -0.333, -0.039) and psychological (*B* = -0.141, *SE* = 0.052, *p* = .007, 95% CI: -0.243, -0.038) aggression.

Unique effects of cool down-task behavior. In Model 2.1, negative behavior during hot tasks (*B* = 0.336, *SE* = 0.103, *p* = .001, 95% CI: 0.133, 0.538), but not cool tasks (*B* = 0.114, *SE* = 0.112, *p* = .308, 95% CI: -0.105, 0.333), was significantly and uniquely associated with physical aggression; a similar pattern was obtained for negative behavior during hot tasks (*B* = 0.441, *SE* = 0.061, *p* < .001, 95% CI: 0.320, 0.561) and cool tasks (*B* = -0.089, *SE* = 0.073, *p* = .224, 95% CI: -0.232, 0.054) in relation to psychological aggression.

In Model 2.2, positive behavior during hot tasks (*B* = -0.287, *SE* = 0.072, *p* < .001, 95% CI: -0.428, -0.146), but not cool tasks (*B* = -0.031, *SE* = 0.085, *p* = .718, 95% CI: -0.197, 0.136), was significantly associated with physical aggression; a similar pattern was obtained for positive behavior during hot tasks (*B* = -0.414, *SE* = 0.061, *p* < .001, 95% CI: -0.535, -0.293) and cool tasks (*B* = 0.083, *SE* = 0.059, *p* = .161, 95% CI: -0.033, 0.199) in relation to psychological aggression.

Interaction of cool-down and hot task behavior. In Model 3.1, the hot task × cool-down task negative behavior interaction was significant in relation to physical (*B* = -0.114, *SE* = 0.050, *p* =

.022, 95% CI: -0.213, -0.197) and psychological (*B* = -0.112, *SE* = 0.032, *p* < .001, 95% CI: -0.174, -0.164) aggression.

Follow-up tests showed that, contrary to the conflict recovery hypothesis, the association of hot task negativity with aggression strengthened at lower levels of cool-down task negativity (Figures 1 and 2). Simple slopes relating hot task negativity to physical aggression were significantly positive at low (*B* = 0.413, *SE* = 0.099, *p* < .001, 95% CI: 0.219, 0.607) and high (*B* = 0.322, *SE* = 0.099, *p* = .001, 95% CI: 0.128, 0.516) levels of cool-down task negativity. Similarly, simple slopes relating hot task negativity to psychological aggression were significantly positive at low (*B* = 0.516, *SE* = 0.066, *p* < .001, 95% CI: 0.387, 0.645) and high (*B* = 0.427, *SE* = 0.06, *p* < .001, 95% CI: 0.310, 0.545) levels of cool-down task negativity.

In Model 3.2, the hot task × cool-down task positive behavior interaction was non-significant in relation to physical (*B* = 0.020, *SE* = 0.046, *p* = .664, 95% CI: -0.071, -0.056) and psychological (*B* = -0.061, *SE* = 0.037, *p* = .094, 95% CI: -0.133, -0.122) aggression.

Figure 1

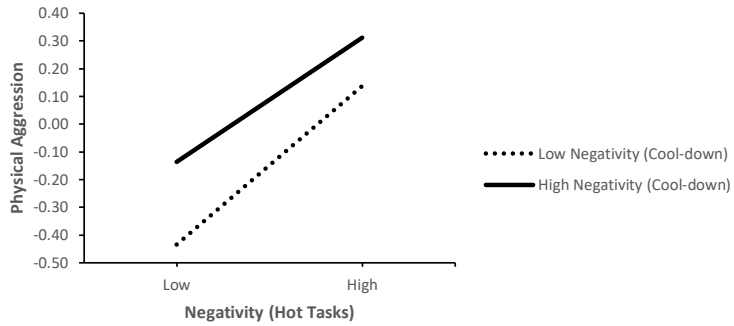
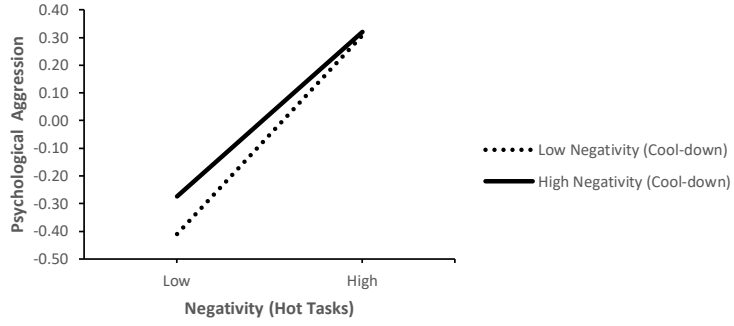


Figure 2



Hot to cool-down task change. In Model 4.1, hot to cool-down task change in negative behavior was not significantly associated with physical (*B* = 0.131, *SE* = 0.129, *p* = .31, 95% CI:

-0.122, 0.383) or psychological (*B* = -0.102, *SE* = 0.084, *p* = .224, 95% CI: -0.267, 0.062) aggression, controlling for hot task negative behavior.

In Model 4.2, hot to cool-down task change in positive behavior was not significantly associated with physical (*B* = -0.027, *SE* = 0.073, *p* = .716, 95% CI: -0.170, 0.117) or psychological (*B* = 0.071, *SE* = 0.051, *p* = .162, 95% CI: -0.029, 0.171) aggression, controlling for hot task positive behavior.

Cool-down relative to hot task behavior. In Model 5.1, relative negative behavior (cool-down/hot tasks) was not significantly associated with physical (*B* = 0.100, *SE* = 0.063, *p* = .113, 95% CI: -0.023, 0.223) or psychological (*B* = -0.034, *SE* = 0.044, *p* = .442, 95% CI: -0.121, 0.053) aggression.

In Model 5.2, relative positive behavior (cool-down/hot tasks) was not significantly associated with physical aggression (*B* = 0.042, *SE* = 0.084, *p* = .619, 95% CI: -0.122, 0.205). It was, however, positively associated with psychological aggression (*B* = 0.155, *SE* = 0.063, *p* = .014, 95% CI: 0.031, 0.278).

Coercion

In Model 6.1, a person's hostility-nonhostility ratio was not significantly associated with negative reinforcement of the person's hostility (*B* = -0.105, *SE* = 0.073, *p* = .150, 95 % CI: -0.224, 0.038). In Model 6.2, a person's physical (*B* = -0.026, *SE* = 0.042, *p* = .540, 95 % CI: -0.109, 0.057) and psychological (*B* = 0.023, *SE* = 0.051, *p* = .657, 95 % CI: -0.077, 0.122) aggression were not significantly associated with negative reinforcement of the person's hostility. In Model 6.3, a person's physical (*B* = -0.061, *SE* = 0.039, *p* = .116, 95 % CI: -0.137, 0.015) and psychological (*B* = -0.01, *SE* = 0.053, *p* = .850, 95 % CI: -0.114, 0.094) aggression were not significantly associated with the person's negative reciprocity.

Implications

The clearest conclusions pertain to recovery from conflict. We hypothesized that worse conflict recovery would be positively associated with physical and psychological aggression. We probed this association from multiple operational vantage points. The results suggest that positive and negative behaviors measured during a cool-down task, following more conflict provoking "hot" tasks, are associated with psychological and physical aggression as hypothesized. However, these associations seem largely to reflect carryover effects of behavior from the hot to cool-down tasks. Controlling for the influence of hot tasks behavior, cool-down task behavior was no longer related to aggression. In contrast, the associations of aggression with both negative and positive behavior in hot tasks were more durable, and with effect sizes in the medium range per Cohen's heuristic (Cohen, Cohen, West, & Aiken, 2003).

One additional operationalization of the conflict recovery process yielded surprising results. We reasoned that that less favorable (i.e., more negative and/or less positive) behavior in hot tasks is less destructive (i.e., more weakly associated with aggression) for individuals who are eventually able to cool down more effectively. Analyses of the interaction of hot and cool-down tasks behavior, however, told a different story. The association of hot task negativity with physical and psychological aggression in fact strengthened at lower levels of cool-down task negativity. One interpretation of this finding is that the shift from high levels of negativity during the hot tasks to low levels of negativity during the cool-down task reflects a disengagement effect. Perhaps such individuals are frustrated, resentful, or exhausted as a result of their negative interactions with their partners during hot tasks, with their low levels of cool-down task negativity reflecting a degree of disengagement toward the end of the observation period. This

post-hoc explanation must be regarded as tentative and we are investigating other approaches that might yield more informative tests of the conflict recovery hypotheses.

Turning to coercion, the present findings did not confirm the coercion model, in which (a) preferential negative reinforcement for hostile behavior via conflict termination is a mechanism that explains one's tendency toward hostile behavior during conflict, and (b) negative reinforcement and reciprocity of the partner's negative behavior are associated with aggression. These findings should be regarded tentatively, however. We encountered several challenges to operationalizing negative reinforcement and negative reciprocity. Despite observing each couple for approximately 1 hour in a variety of provocative tasks, conflict bouts were sometimes fairly short and/or infrequent. The precision of behavior sequence estimates is attenuated the shorter and less-frequently they are observed. Accordingly, we are investigating other approaches that might yield more informative tests of the coercion hypotheses.

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Table 1. Questionnaire Measures

Construct	Measure	Reference
Physical dating aggression	Safe Dates Physical Dating Abuse Scales; perpetration and victimization subscales	Foshee, 1996
Psychological dating aggression	Conflict in Adolescent Dating Relationships Inventory (CADRI); verbal abuse perpetration and victimization subscales	Wolfe et al., 2001
Sexual dating aggression	CADRI; sexual abuse victimization subscale	Wolfe et al., 2001
Interparental aggression	Modified Revised Conflict Tactics Scale; psychological and physical aggression subscales	Straus, Hamby, Boney-McCoy, & Sugarman, 1996
Parent-child aggression	Modified Parent-Child Conflict Tactics Scales; psychological and physical aggression subscales	Straus, Hamby, Finkelhor, Moore, & Runyan, 1998
Externalizing behavior	Adolescent Symptom Inventory 4; conduct problems, oppositional defiant, ADHD subscales	Gadow et al., 2002
Depression	PROMIS Pediatric Anxiety and Depressive Symptoms Scales' Depression short form	Irwin et al., 2010
Anger	PROMIS Pediatric Scale Anger short form	Irwin et al., 2012
Aggressive peer models	Peer Dating Aggression Scale	Kinsfogel & Grych, 2004
Attitudes toward dating violence	Attitudes about Aggression in Dating Situations Scale	Slep et al., 2001
Antisocial personality	Inventory of Callous-Unemotional Traits	Frick, 2003
Relationship satisfaction	Couples Satisfaction Index-4	Funk & Rogge, 2007
Closeness	Inclusion of Other in the Self scale	Aron et al., 1992
Nonaggressive conflict	Network of Relationships Social Provision Version (NRI-SPV); conflict and antagonism subscales	Furman & Buhrmester, 1985
Bullying victimization	Forms of Bullying Scale; victimization subscale (FBS-V)	Shaw et al. 2013
Jealousy	Multidimensional Jealousy Scale Short Form (SF-MJS); cognitive and emotional jealousy subscales	Elphinston et al., 2011
Areas of conflict	Conflict Assessment Tool-Adolescent	Capaldi et al., 2007; Lorber et al., 2014