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Experiences of Psychological and Physical Aggression in Adolescent Romantic Relationships: Links to Psychological Distress

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Abstract

Objective—This research examined links between adolescents’ experiences of psychological and physical relationship aggression and their psychological distress. Experiences of psychological and physical aggression were expected to correlate positively with symptoms of psychological distress, but experiences of psychological aggression were expected to partially account for the association between experiences of physical aggression and psychological distress. In addition, psychological aggression was hypothesized to be perceived as more unpleasant and less playful than physical aggression.

Method—Participants were 125 high school students. Relationship aggression was assessed over an eight-week period using two methods: (1) a retrospective method based on a single assessment at the end of the eight-week period, and (2) a cumulative method based on multiple assessments conducted during the eight-week period. Adolescents’ appraisals of the aggression were also measured, as were their reports of symptoms of psychological distress.

Results—Adolescents’ experiences of psychological and physical relationship aggression correlated positively, but inconsistently, with their symptoms of psychological distress. In analyses considering both forms of aggression simultaneously, psychological aggression was related to adolescents’ distress, but physical aggression was not. This finding emerged across both methods of assessing for relationship aggression. Psychological aggression was more likely than physical aggression to be rated as unpleasant, and less likely to be attributed to the partner “playing around”.

Conclusions—The study of adolescent relationship aggression will benefit by expanding the focus of aggression to include psychological aggression as well as physical aggression, and by examining adolescents’ appraisals of the aggression they experience.

Practice Implications—The findings highlight the importance of a broad view of aggression in adolescent relationships. Psychological aggression appears to be at least as important to adolescent well-being as physical aggression in dating relationships. In addition, it may be useful to consider how adolescents’ interpret the intent of the aggression that they experience.

Keywords

Relationship Aggression; Psychological Aggression; Adolescence

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Experiencing aggression in the context of a romantic relationship can have considerable consequences for adolescents' psychological adjustment. In addition to physical injury, symptoms of anxiety, trauma, and depression have all been linked to adolescents' experiences of aggression from a romantic partner (e.g., Bookwala, Frieze, Smith, & Ryan, 1992; Callahan, Tolman, & Saunders, 2003; Holt & Espelage, 2005; Jackson, Cram, & Seymour, 2000; Molidor & Tolman, 1998). These psychological symptoms can be debilitating in their own right (Rudolph, Hammen, & Daley, 2006; Wolfe, Rawana, & Chiodo, 2006). They may also prompt substance abuse (Lipschitz, Rasmusson, Anyan et al., 2003), conflict within interpersonal relationships (Rudolph, Hammen, Burge et al., 2000), and the perpetration of aggression and violence (Harper, Austin, Cercone, & Arias, 2005). In short, the potentially debilitating psychological consequences of adolescents' experiences of relationship aggression call for a better understanding of this form of interpersonal violence.

Research on aggression in adolescent romantic relationships often focuses on acts of physical aggression, such as pushes, slaps, and hits. Such acts warrant the attention they receive; however, they seldom occur in the absence of concomitant psychological aggression (James, West, Deters, & Armijo, 2000; O'Leary & Slep, 2003), exemplified by verbal and emotional abuse (e.g., insults, ridicule in front of others). As with physical aggression, experiencing psychological aggression in a romantic relationship correlates positively with adolescents' psychological distress (Holt & Espelage, 2005; Jezl, Molidor, & Wright, 1996; Katz & Arias, 1999). However, psychological aggression tends to be much more prevalent than physical aggression in adolescent romantic relationships (Holt & Espelage, 2005; Jackson et al., 2000; Wolfe, Scott, Reitzel-Jaffe et al., 2001), and frequent unpleasant events, even seemingly minor ones, can damage psychological health (Kanner, Coyne, Schaefer, & Lazarus, 1981). As a result, adolescents' experiences of psychological aggression may be as important as experiences of physical aggression in predicting psychological distress.

In the adult battering literature, women view their partners' psychological aggression as more negative than their physical aggression (Follingstad, Rutledge, Berg, Hause, & Polek, 1990; Vitanza, Vogel, & Marshall, 1995). In addition, women's psychological distress is more strongly related to the frequency of experiencing psychological aggression than physical aggression (Arias & Pape, 1999; Sackett & Saunders, 1999; Taft, Murphy, King, Dedeyn, & Musser, 2005). It is not known whether these findings on psychological aggression generalize to adolescent romantic relationships. However, it seems plausible to hypothesize that psychological aggression may help explain the anxiety, trauma, and depressive symptoms among adolescents who experience physical relationship aggression.

Examining adolescents' appraisals of aggression may enhance the understanding of how experiences of psychological and physical aggression affect youth adjustment. In other literatures, appraisals have proven extremely valuable in understanding the impact of aggression on children and adolescents (e.g., Grych, Fincham, Jouriles, & McDonald, 2000). The literature evaluating appraisals of intent and consequences of adolescent relationship aggression suggests that adolescents attribute some of the physical aggression that occurs in their romantic relationships to their partner's "joking" or "playing around" (Arriaga, 2002). Such interpretations are more common among male than female adolescents (Jackson et al., 2000; Molidor & Tolman, 1998). At present, there are no data systematically comparing adolescents' appraisals of acts of psychological aggression relative to acts of physical aggression (e.g., whether the acts were appraised as playfully intended). At least some of the psychological aggression in adolescent romantic relationships is likely to be appraised as playfully intended, but items on most measures of psychological aggression conflate aggressive acts with appraisals of the acts (e.g., "insulted me with putdowns"). Such

descriptions may result in adolescents being less likely to include in their reports of psychological aggression those acts they judge to have been intended as playful.

It is also not clear if including acts of aggression, delivered playfully, dilutes relations between adolescents' experiences of relationship aggression and psychological distress. This is not to say that physical or psychological aggression, delivered playfully, does not lead to psychological distress. On the contrary, it could potentially cause considerable harm, but this issue has not been researched, as most studies of adolescent relationship aggression simply assess for the occurrence of discrete acts of aggression (e.g., push, kick). It has been suggested that frequency counts of acts of violence "can be very misleading, because the psychological significance and the context of abusive actions are key aspects in defining relationship violence" (Wekerle & Wolfe, 1999, p. 438). Although there has been some attention given to context and appraisals of aggressive acts in research on aggression in adolescent romantic relationships (e.g., Foo & Margolin, 1995; Jackson et al., 2000; Molidor & Tolman, 1998), there have not been systematic attempts to compare aggression data, refined by adolescent appraisals of the aggression, to counts of the occurrence of aggressive acts.

In an earlier study focusing on the assessment of aggression in adolescent romantic relationships (Jouriles, McDonald, Garrido, Rosenfield, & Brown, 2005), experiences of relationship aggression were assessed over an eight-week period using two methods: a *retrospective method* based on a single assessment conducted at the end of the eight-week period, asking about specific acts of aggression during the previous eight weeks, and a *cumulative method* based on four assessments conducted over consecutive two-week intervals, asking about specific acts of aggression during the two-week period prior to each assessment. For the cumulative method, data from the four assessments were aggregated. Each method covered the same eight-week period and measured aggression with the same questionnaire items. The original study compared the data yielded by these two methods. Results indicated that the cumulative method yielded higher prevalence rates for physical relationship aggression and threatening behavior, as well as stronger associations between adolescents' experiences of relationship aggression and symptoms of psychological distress. Adolescents' experiences of psychological aggression (verbal and emotional abuse) were not examined in that study.

In the present research, hypotheses about adolescents' experiences of psychological and physical aggression and their relation to symptoms of psychological distress are examined using data from the Jouriles et al. (2005) study. Experiences of psychological and physical aggression were hypothesized to correlate positively with symptoms of psychological distress. However, associations between experiences of physical aggression and psychological distress were expected to be accounted for, at least in part, by the experiences of psychological aggression. In prior research, associations have emerged between experiences of psychological and physical relationship aggression and many different symptoms of psychological distress (Bookwala et al., 1992; Callahan et al., 2003; Holt & Espelage, 2005; Jackson et al., 2000; Molidor & Tolman, 1998; Wolfe, Wekerle, Scott, Straatman, & Grasley, 2004), but consistent findings regarding relations between particular types of aggression and specific types of psychological distress have not emerged. Thus, different types of psychological distress were assessed in this study (symptoms of trauma, depression, and relationship anxiety), but specific hypotheses about differential relations of psychological and physical aggression to specific types of psychological distress were not made. Rather, it was expected that experiences of psychological aggression would be associated with psychological distress in general, after accounting for experiences of physical aggression. These hypotheses were examined across the two methods of data

collection (retrospective and cumulative), reasoning that a replication of findings across methods would represent a more powerful test of the hypotheses.

With the cumulative method of data collection, participants' appraisals of the unpleasantness of the aggressive acts were recorded, as were the participants' appraisals of their partners' intentions (was their partner "playing around" when committing the act). Consistent with the findings of other investigators who have evaluated appraisals of intent and consequences of adolescent relationship aggression (Jackson et al., 2000; Molidor & Tolman, 1998), it was hypothesized that males would interpret acts of relationship aggression more benignly (as less unpleasant) than females. In addition, acts of psychological aggression, in comparison with acts of physical aggression, were hypothesized to be experienced as more unpleasant and less likely to be attributed to the partner playing around. The present research also afforded the opportunity to explore whether the relation between adolescents' experiences of relationship aggression and their psychological distress is altered when some of the aggression is appraised as benign or as playfully intended.

Method

The present research is a secondary analysis of existing data (Jouriles et al., 2005). Participants in this research were the same as those in Jouriles et al., and there is overlap in the measures used. Consequently, the description of the participants, procedures, and several of the measures is the same as in Jouriles et al.

Participants

Participants were 125 students (52% female) in fall and spring semester health classes at three public high schools. The mean age of participants was 15.4 years ($SD = 1.0$). Fifty-five percent were in the 9th grade, 25% in the 10th grade, 14% in the 11th grade, and 6% in the 12th grade. Thirty-nine percent reported their ethnicity to be Hispanic, 34% Caucasian, 18% African-American, and 9% indicated "Other" or did not report their ethnicity. Only students who indicated on an initial screening questionnaire, administered during health classes, that they were "currently going out with, around with, seeing or dating someone" were eligible to participate in this research. The average length of these students' relationships was 25 weeks ($SD = 39$).

Students eligible on the basis of responses to the initial screening question were contacted by telephone within a few days after the screening and invited to meet with research staff at the school during the lunch period. At this meeting, the study was described to the students, and parental and participant consent forms were distributed to interested students. Students were offered a small financial incentive to participate in the study, along with meals during the lunch-time assessments. Eligible students were those who returned signed consent forms within 2 weeks of their distribution. At the time that the forms were returned, students participated in a 5-minute interview to determine whether they were still seeing or dating someone. Those who indicated they were not were considered ineligible for the study. Students were not informed of the reasons for ineligibility.

Approximately 60% ($n = 134$) of the students who indicated they were seeing or dating someone on the initial screening questionnaire participated in this study. Reasons for non-participation at the outset of the study included: student not interested in participating, inability to contact student after completion of the screening questionnaire, or student did not return parental consent form. Participants did not differ from non-participants on any of the measured demographic variables obtained on the screening questionnaire (age, grade, and ethnicity).

Of the 134 students who participated, data from nine participants were not used, resulting in a final sample of 125. Among the nine whose data were not used, five dropped out of the study prior to completing the final interview, two indicated dating circumstances that precluded physical relationship aggression (e.g., internet boyfriend), and two allowed insufficient time for the final interview and were unable to complete it.

Procedure

Students participated in four assessments spaced two weeks apart (2, 4, 6 and 8 weeks after the screening assessment). At each assessment, they completed the Relationship Violence Interview (Jouriles et al., 2005); at the fourth and final assessment, they also completed the Conflict in Adolescent Dating Relationships Inventory (Wolfe et al., 2001) and the measures of psychological distress (all measures are described below). Assessments were conducted individually and in private during the students' lunch period. Lunches (pizza, sandwiches) were provided during assessments. All procedures and measures were approved by the Institutional Review Board of the university with which the first author was affiliated.

Measures

The Conflict in Adolescent Dating Relationships Inventory (CADRI; Wolfe et al., 2001) was administered once, at the final assessment point, to assess relationship aggression over the previous eight weeks. The CADRI is a 70-item scale that asks respondents to indicate how often acts of aggression happened with a current or former partner "while you were having an argument." For each item, the CADRI assesses both perpetration and victimization; however, the present study evaluated only victimization experiences. The specific acts of aggression on the CADRI overlap substantially with those found on other measures of relationship aggression (e.g., Conflict Tactics Scales; Straus, 1979), but the CADRI was designed specifically for use with adolescents. It is widely used in research on adolescent dating relationships (e.g., Hokoda, Ramos-Lira, Celaya et al., 2006; Schiff & Zeira, 2005; Wolfe et al., 2004).

Fourteen CADRI items assessing experiences of physical violence and emotional/verbal abuse were used in this research. The four physical violence items were: *slapped me or pulled my hair; pushed, shoved, or shook me; kicked, hit, or punched me; threw something at me*. The ten emotional/verbal abuse items were used as the index of psychological aggression: *did something to try and make me feel jealous; brought up something bad that I had done in the past; said things just to make me angry; spoke to me in a mean or hostile tone of voice; insulted me with putdowns; ridiculed or made fun of me in front of others; blamed me for the problem; accused me of flirting with another guy/girl; threatened to end the relationship; kept track of who I was with and where I was*. In the present study, response choices on the CADRI were *0 = Never, 1 = Once, 2 = Twice, 3 = Three times, 4 = Four or more times*. The response scale for indicating the frequency of acts of aggression was modified from the original version of the CADRI because of the shorter reference period in the present study (past two months versus past year). Coefficient alpha for the present sample was .71 for physical aggression and .81 for psychological aggression.

The Relationship Violence Interview (RVI; Jouriles et al., 2005) was administered at each of the four assessment points to measure adolescents' experiences of physical and psychological aggression with a current or former partner over the previous two weeks. The RVI is a 44-item scale designed to assess the frequency of a variety of positive and negative behaviors that may occur in adolescent dating relationships. It includes the same four acts of physical aggression and 10 acts of psychological aggression included on the CADRI. The response choices for the RVI items were *0 = Never, 1 = Once, 2 = Twice, 3 = Three times, 4 = Four or more times*. Coefficient alpha was computed for the physical and psychological

aggression items at each of the four RVI assessments; the average of these was .76 for physical aggression and .78 for psychological aggression.

Reports of aggression from the four RVI assessments were aggregated across the four assessment points to yield cumulative RVI scores (one for physical aggression and one for psychological aggression). These cumulative RVI scores reflect aggression occurring over the entire two-month reference period. In prior analyses (Jouriles et al., 2005), RVI scores for a single two-week period (data from the RVI at a single assessment point) did not demonstrate predictive validity, with respect to predicting psychological distress; however, cumulative RVI scores (data from the RVI aggregated across four assessment points) did. Thus, cumulative RVI scores were used in all analyses.

To assess appraisals of the aggressive acts, two follow-up questions were administered as part of the RVI for each act of physical or psychological aggression that was reported. Specifically, participants were asked to rate how pleasant/unpleasant their experience of the act had been ($-1 = Unpleasant$, $0 = Neither\ pleasant\ nor\ unpleasant$, $1 = Pleasant$), and whether they thought their partner was “playing around” ($0 = No$, $1 = Yes$) when committing the act. This method of assessing appraisals of the aggressive acts has the advantage of linking the appraisals to specific acts of physical and psychological aggression. However, only adolescents who report acts of aggression have the opportunity to report appraisals (i.e., appraisal data were not collected from adolescents who did not report acts of aggression).

The degree to which participants rated physical aggression as unpleasant was computed by taking the mean of participants’ ratings of pleasantness/unpleasantness across all of the reported physical aggression items at each of the four assessments. An identical method was used to compute the degree to which participants rated psychological aggression as unpleasant. The degree to which participants attributed physical and psychological aggression to their partners as “playing around” was similarly computed.

The Relationship Anxiety Inventory (McDonald & Jouriles, 2005) was administered at the final assessment point. Adolescents were asked to indicate *how often you felt this way about your relationship or relationships during the past two months* in response to statements describing relationship anxiety (e.g., *I felt tense from fighting, arguing or disagreeing with my partner; I worried about my partner doing something bad to me; I felt like avoiding my partner*). Response options were $1 = Never$, $2 = Rarely$, $3 = Sometimes$, $4 = Often$. Responses were summed to form a single composite score. Coefficient alpha for this eight-item scale was .68.

The Intrusive Thoughts, Avoidance, and Hyperarousal Subscales from the Children’s Impact of Traumatic Events Scale-Revised (CITES-R; Wolfe, Gentile, Michienzi, Sas, & Wolfe, 1991) were also administered at the final assessment point. Adolescents were asked to indicate whether statements describing trauma symptoms (e.g., *I try to stay away from things that remind me of what happened*) were $1 = Not\ True$, $2 = Somewhat\ True$, $3 = Very\ True$ of their thoughts and feelings regarding the *worst thing or things that happened in a current or past relationship during the previous two months*. The items from these three subscales were summed to form a single measure of trauma symptoms. Coefficient alpha for this 19-item scale was .83.

The Center for Epidemiological Studies – Depression scale (CESD; Radloff, 1977) was also administered at the final assessment point. Respondents were asked to indicate the frequency of depressive symptoms experienced during the week prior to the assessment. Potential responses were $1 = Rarely\ or\ none\ of\ the\ time - less\ than\ a\ day$, $2 = Some\ or\ a\ little\ of\ the\ time - 1-2\ days$, $3 = Occasionally\ or\ a\ moderate\ amount\ of\ the\ time - 3-4\ days$, $4 = Most$

or all of the time – 5–7 days, and responses were summed to form a single composite score. Coefficient alpha for this 20-item scale was .84.

Results

Descriptive Data and Preliminary Considerations

On the CADRI, 91% ($n = 114$) of participants reported experiencing at least one act of psychological aggression and 27% ($n = 34$) reported experiencing at least one act of physical aggression in the previous eight weeks. On average, there were 10.6 ($SD = 8.56$) acts of psychological aggression and 1.1 ($SD = 2.47$) acts of physical aggression reported, $t(125) = 13.65, p < .001$.

On the RVI, almost all of the adolescents reported experiencing at least one act of psychological aggression (96%; $n = 120$) and slightly less than half (48%; $n = 60$) reported experiencing at least one act of physical aggression across the four time points. The mean number of acts of aggression reported on the RVI over the eight-week assessment period was 23.3 ($SD = 20.15$) for psychological aggression and 3.8 ($SD = 7.07$) for physical aggression, $t(125) = 11.62, p < .001$.

The most prevalent act of psychological aggression experienced was: *accused me of flirting with another guy/girl* (57.6% on the CADRI and 71.2% on the RVI). The most prevalent act of physical aggression experienced was: *pushed, shoved, or shook me* (16.1% on the CADRI and 35.2% on the RVI).

In subsequent analyses, physical aggression scores were dichotomized (0 = did not occur, 1 = did occur) because the distributions of the continuous measures (the sum of the number of reported acts of physical aggression) were highly skewed (CADRI skewness = 2.93, RVI skewness = 2.39), and transforming them failed to reduce skewness to an acceptable level. Such skewness of physical aggression scores is common in research on intimate partner violence, and dichotomization is often used to address the situation (Archer, 2000). To avoid comparing dichotomous physical aggression scores with continuous psychological aggression scores, psychological aggression scores were also dichotomized (0 = below the median, 1 = at or above the median).

Table 1 presents the means, standard deviations, and correlations among the study variables. Both measures of psychological aggression (CADRI and RVI) were associated with relationship anxiety; the CADRI measure of psychological aggression was also associated with depressive symptoms. The RVI measure of physical aggression was associated with relationship anxiety and trauma symptoms.

Relationship Aggression and Distress (Retrospective Method, CADRI)

To determine whether each form of aggression (psychological and physical) relates to psychological distress after controlling for the other form of aggression, multivariate multiple regression analyses were conducted. The three measures of psychological distress (relationship anxiety, trauma symptoms, and depressive symptoms) served as the dependent variables. The predictor variables in the initial model were physical and psychological aggression as assessed by the CADRI. As reviewed in the introduction, adolescent males and females differ in their appraisals of acts of relationship aggression (Jackson et al., 2000; Molidor & Tolman, 1998); thus, participant sex and the interactions between sex and psychological and physical aggression were also included as predictor variables. In addition, given the ages of the participants in the sample and the changing nature of romantic relationships during the course of adolescence, it was reasoned that it would be conservative to also include adolescent age and the length of the relationship as predictors. None of the

interaction terms were associated with distress, nor was participant sex or the length of the relationship; consequently, these variables were dropped from the model. Participant age, however, was related to psychological distress; thus it was retained in the model, and the analysis was recomputed.

In this final model, psychological aggression was associated with symptoms of psychological distress after controlling for physical aggression and age, Wilks' $\lambda = .84$, $F(3, 113) = 7.27$, $p < .001$, $\eta^2 = .16$. However, physical aggression was not associated with symptoms of psychological distress after controlling for psychological aggression and age. Inspection of the univariate results (see Table 2) for the multivariate finding with psychological aggression indicated that, after controlling for physical aggression and age, psychological aggression was related to relationship anxiety, $b = 3.65$, $t(115) = 4.62$, $p < .001$, $sr^2 = .16$. Relations between psychological aggression and trauma symptoms, $b = 2.30$, $t(115) = 1.72$, $p = .09$, $sr^2 = .03$, as well as depressive symptoms, $b = 3.11$, $t(115) = 1.90$, $p = .06$, $sr^2 = .03$, approached statistical significance.

Relationship Aggression and Distress (Cumulative Method, RVI)

The analysis was repeated, this time using psychological and physical aggression as assessed by the RVI as predictor variables. As in the analyses using the CADRI, none of the interaction terms were associated with psychological distress, nor was participant sex or the length of the relationship, so those variables were dropped from the model. Participant age was related to psychological distress and was retained in the final model.

Psychological aggression was related to symptoms of psychological distress after controlling for physical aggression and age, Wilks' $\lambda = .90$, $F(3, 113) = 4.21$, $p < .01$, $\eta^2 = .10$, but physical aggression was not related to symptoms of psychological distress after controlling for psychological aggression and age. Inspection of the univariate results (see Table 2) for the multivariate finding with psychological aggression showed that, when controlling for physical aggression and age, psychological aggression was positively associated with relationship anxiety, $b = 2.62$, $t(115) = 3.25$, $p < .001$, $sr^2 = .08$, but not with symptoms of trauma or depression.

Additional Analyses with Relationship Aggression and Distress

Some of the adolescents (36 of the 125) "broke-up" with their partner during the 8-week data collection period. To be conservative, the analyses were recomputed using only the subset of adolescents who dated the same partner throughout the study ($n = 89$). The results were virtually identical to the analysis of the entire sample. The only substantive differences were additional findings that: (1) adolescents' experiences of psychological aggression on the RVI correlated with depressive symptoms, ($r = .32$, $p < .01$), and (2) in the univariate results for the multivariate finding that experiences of psychological aggression on the RVI related to symptoms of psychological distress after controlling for physical aggression and age, psychological aggression was associated with depressive symptoms as well as relationship anxiety after controlling for physical aggression and age, $b = 4.73$, $t(85) = 2.62$, $p < .05$.

Appraisals of Aggression

It was expected that males would interpret relationship aggression more benignly than females. However, t-tests indicated no differences between males and females in their appraisals of the unpleasantness of physical and psychological aggression: $M_{males} = .10$, $M_{females} = .10$, $t(57) = .07$, $n.s.$, for physical aggression, $M_{males} = -.40$, $M_{females} = -.48$, $t(118) = .92$, $n.s.$, for psychological aggression. Similarly, there were no differences between males and females on appraisals of aggression as their partner "playing around", $M_{males} = .$

92, $M_{females} = .84$, $t(58) = 1.13$, $n.s.$, for physical aggression; and $M_{males} = .37$, $M_{females} = .30$, $t(114) = 1.40$, $n.s.$, for psychological aggression. We also examined relations between other demographic variables (age, length of relationship) and adolescents' appraisals of aggression, but these analyses yielded no significant associations.

Compared with physical aggression, adolescents were hypothesized to appraise psychological aggression as more unpleasant and less attributable to the partner playing around. Fifty-nine of the 60 participants who reported experiencing physical aggression on the RVI also reported experiencing psychological aggression. Directly comparing appraisals of physical aggression to appraisals of psychological aggression necessitated limiting the analysis to these 59 participants who reported experiencing both types of aggression on the RVI. This was done to ensure that observed differences could be attributed to differences in appraisals across the two forms of aggression rather than differences between the sample of those who experienced psychological aggression ($n = 120$) and those who experienced physical aggression ($n = 60$).

Matched-paired t-tests indicated that among those who experienced both forms of aggression, psychological aggression was rated as more unpleasant ($M = -.43$, $SD = .43$) than physical aggression ($M = .10$, $SD = .69$), $t(57) = 7.23$, $p < .001$, and psychological aggression ($M = .41$, $SD = .31$) was less likely than physical aggression ($M = .89$, $SD = .29$) to be attributed to the partner playing around, $t(57) = 9.00$, $p < .001$. Presented a bit differently, almost all (97%; 57/59) rated at least one act of psychological aggression as unpleasant, compared with 41% (24/59) who rated at least one act of physical aggression as unpleasant, McNemar's $\chi^2(1) = 30.12$, $p < .001$. Only 3% (2/59) rated every act of psychological aggression as having occurred when the partner was playing around; the comparable figure for physical aggression was 78% (46/59), McNemar's $\chi^2(1) = 44.00$, $p < .001$.

Additional Analyses with Appraisals of Aggression

The RVI appraisal ratings of unpleasantness were used to form scales of unpleasant physical and unpleasant psychological aggression. Specifically, the scores of psychological and physical aggression were reduced to include only those acts of aggression rated as unpleasant. At least one act of unpleasant psychological aggression was reported by 89% ($n = 111$) of participants, and at least one act of unpleasant physical aggression was reported by 19% of participants ($n = 24$).

Similarly, the RVI appraisal ratings of playing around were used to form scales of not-playful physical and not-playful psychological aggression. That is, scores of whether the partner was rated as playing around during acts of psychological and physical aggression were reduced to include only those acts of aggression rated as not playful. At least one act of not-playful psychological aggression was reported by 90% ($n = 113$) of participants, and at least one act of not-playful physical aggression was reported by 10% of participants ($n = 13$).

The reduced aggression scores (unpleasant psychological, unpleasant physical, not-playful psychological, not-playful physical) were dichotomized using the same approach taken in dichotomizing the original scores. That is, the physical aggression scores were dichotomized as aggression present versus absent, and the psychological aggression scores were dichotomized at the median. Correlations among the reduced scores and the measures of psychological distress are presented in Table 3. Following Meng, Rosenthal and Rubin (1992), the magnitude of the correlations between psychological distress and aggression across the reduced and the full measures of psychological and physical aggression were compared (for example, the correlation between not-playful psychological aggression and

relationship anxiety, $r = .44$, was compared to the comparable correlation with the full measure of psychological aggression on the RVI, which was presented in Table 1, $r = .39$). With one exception, the magnitude of the correlations did not differ in these comparisons: the correlation between unpleasant physical aggression and relationship anxiety, $r = .12$, was smaller than the correlation of all physical aggression with relationship anxiety, $r = .30$, $z_{Difference} = 1.97, p = .05$.

Discussion

As expected, adolescents' experiences of psychological and physical relationship aggression were both positively correlated with adolescents' psychological distress, although the pattern of correlations was not consistent across different symptoms of psychological distress or the two methods by which relationship aggression was measured (retrospective and cumulative). Psychological aggression, but not physical aggression, was uniquely related to psychological distress when both forms of aggression were considered simultaneously in analyses. This pattern emerged across both methods of measuring relationship aggression. These findings regarding psychological aggression are consistent with research on adult women indicating that experiences of psychological aggression may be more detrimental to mental health than experiences of physical aggression (Arias & Pape, 1999; Follingstad et al., 1990; Sackett & Saunders, 1999; Taft et al., 2005; Vitanza et al., 1995).

One explanation for why psychological aggression emerged as the salient predictor of psychological distress is that it occurred much more frequently than physical aggression, and it typically was perceived as more unpleasant and more intentionally hurtful (i.e., the partner was not playing around). Continuing unpleasant events, even seemingly minor ones, can damage psychological health (e.g., Kanner et al., 1981). In addition, psychological aggression might be experienced as a form of negative peer evaluation, which is extremely important during adolescence (Lopez & DuBois, 2005; Scholte, van Aken, & van Lieshout, 1997) and may be especially unpleasant for this age group. Although the precise reasons for the relations between experiences of psychological aggression and psychological distress were not revealed in the present research, the findings nevertheless highlight the importance of considering psychological aggression in research on the psychological consequences of adolescents' experiences of relationship aggression.

The examination of adolescents' appraisals regarding relationship aggression yielded several interesting and potentially important results. Perhaps most intriguing was the large proportion of adolescents (80%) who reported that some of their partner's physical aggression occurred when the partner was playing around. This finding is consistent with speculation that a meaningful proportion of the physical aggression in adolescent relationships is attributed to the partner joking or playing (Arriaga, 2002). However, the proportion in the present research was larger than expected, and it is not clear why this appraisal was made so frequently. One possibility is that this is simply an accurate reflection of the nature of much of the physical aggression occurring in adolescent romantic relationships within general community samples. It is also possible that the cumulative assessment method and the RVI may have pulled for the reporting of less-traumatic aggressive acts, such as those occurring in the context of playing around. That is, the RVI inquires about positive as well as negative behaviors, measures the occurrence of behaviors over relatively short time intervals (2 weeks), and does not restrict the assessment of aggressive acts to those committed during conflicts or arguments. Each of these methodological factors may influence the types of aggressive acts reported.

Another possibility is that the "playing around" appraisals are not an accurate accounting of the actual intent behind most aggressive actions. Rather, the appraisals may simply be the

victims' *post-hoc* reinterpretation of the physical aggression. Although much of the physical aggression experienced by adolescents may indeed be distressing, some adolescents may reinterpret the context of specific acts of aggression (e.g., their partner was playing around) after the fact, perhaps to justify remaining in an aggressive relationship (Arriaga, 2002). Because the present study is among the first empirical attempts to systematically measure adolescents' appraisals of the context in which relationship aggression occurs, the finding should be considered preliminary. On the other hand, the finding is intriguing, potentially important, and warrants further investigation.

Relationship anxiety emerged as a robust correlate of adolescents' experiences of psychological aggression. Adolescents who reported experiencing frequent occurrences of psychological aggression tended to report more frequent worries about being alone with their partner, worries about their partner doing something bad to them, and wanting to avoid their partner. Although the construct of relationship anxiety is relatively new compared to the much more familiar constructs of trauma and depression, its correlations with adolescents' symptoms of trauma and depression suggest its validity. It also may prove to be a useful construct in helping to identify adolescents who are in abusive relationships.

The pattern of findings with adolescents' experiences of physical aggression was somewhat unexpected. Adolescents' experiences of physical relationship aggression were correlated inconsistently with psychological distress. Specifically, with the RVI, two of the three bivariate correlations were statistically significant (relationship anxiety, trauma); with the CADRI, none were. In addition, the relations observed in the correlational analyses disappeared in regression analyses that controlled for experiences of psychological aggression. This pattern of findings may be due, in part, to the nature of the physical aggression recorded in this study. That is, the methods employed may have mitigated the likelihood of measuring many incidents of severe physical relationship aggression. With a longer assessment period, or with a sample of adolescents at higher risk for experiencing relationship aggression, more severe (and presumably more intentional and harmful) acts of physical aggression may have been captured, and such acts may be more likely to be associated with psychological distress.

Contrary to hypotheses, males did not interpret acts of relationship aggression more benignly than females. In addition, comparisons of different methods for coding the aggression data did not yield differences in the magnitude of relations between experiences of aggression and psychological distress. That is, when only those aggressive acts considered unpleasant or not-playful were counted, experiences of aggression did not correlate more strongly with measures of psychological distress than counts of all aggressive acts. In fact, one relation was reduced in magnitude. It is difficult to interpret these null results, because there may be multiple possible reasons for their occurrence; however, it must also be acknowledged that null results may have emerged because there indeed are no differences. For example, although it seems plausible that experiencing acts of aggression appraised as "playing around" would have a less negative impact on psychological adjustment than acts of aggression not appraised this way, it is also possible that acts of aggression appraised as "playing around" are still experienced as hurtful or abusive (Sears, Byers, Whelan, Saint-Pierre, & The Dating Violence Research Team, 2006) and thus may negatively influence psychological adjustment.

Several limitations must be considered in interpreting the present findings. As is true for most of the scientific literature on adolescent relationship aggression, all of the data for this research were collected from a single source (the adolescents). Reliance on a single source, as opposed to multiple sources, typically yields lower rates of aggression (Jouriles & O'Leary, 1985; Simpson & Christensen, 2005). The use of a multi-method, multi-agent

methodology may have resulted in a more valid assessment of psychological and physical relationship aggression (Capaldi & Clark, 1998; Capaldi & Crosby, 1997). A second limitation is that only victimization experiences were assessed in this research, and the assessment of appraisals of the intent of aggression was very narrow. In addition, the assessment of victimization experiences was limited, and could have included other acts of aggression such as those sometimes referred to as relational or social aggression. A more comprehensive measurement of violence experiences (both perpetration and victimization) and appraisals of these experiences would have likely yielded a broader understanding of how psychological and physical relationship aggression relates to adolescent psychological adjustment. A third limitation is that the findings cannot be interpreted to indicate that psychological aggression in adolescent romantic relationships causes psychological distress. Rather, the findings should be interpreted to suggest that adolescents who experience relatively high levels of psychological relationship aggression are at higher risk for experiencing symptoms of psychological distress than adolescents who experience low levels of psychological relationship aggression, and this association emerges even after considering physical relationship aggression.

In sum, the present findings highlight the importance of considering psychological aggression in research on the psychological consequences of aggression in adolescent romantic relationships. These findings also highlight the potential importance of measuring adolescents' appraisals of relationship aggression. The assessment of such appraisals can inform theory and enhance understanding of the nature, correlates and consequences of relationship aggression among adolescents. The present findings pertaining to appraisals about physical relationship aggression, and the high prevalence of "playing around" appraisals for physical aggression, are a case in point, and they warrant further exploration.

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Table 1

Correlations Among the Study Variables

Variable	1	2	3	4	5	6	7	Mean (SD)
1. Psyc. aggression (CADRI)	--							0.56 (.50)
2. Phys. aggression (CADRI)	.29*	--						0.27 (.45)
3. Psyc. aggression (RVI)	.52*	.24*	--					0.51 (.50)
4. Phys. aggression (RVI)	.30*	.53*	.36*	--				0.48 (.50)
5. Relationship anxiety	.44*	.12	.39*	.30*	--			17.82 (4.60)
6. Trauma symptoms	.16	-.01	.10	.18*	.54*	--		32.80 (7.02)
7. Depressive symptoms	.21*	.08	.12	.17	.43*	.50*	--	34.41 (8.84)

Note. Aggression measures are dichotomized. The appropriate correlation coefficient (e.g., Pearson, point-biserial, phi) was computed for each pair of variables.

* *p* .05.

Table 2
Relation of Psychological and Physical Aggression to Psychological Distress Symptoms

Variables	CADRI (retrospective method) ¹			RVI (cumulative method) ²		
	<i>b</i> (SE)	<i>t</i> (df = 115)	<i>sr</i> ²	<i>b</i> (SE)	<i>t</i> (df = 115)	<i>sr</i> ²
Relationship anxiety						
Age	-.65 (.39)	-1.67	.02	-.57 (.40)	-1.44	.02
Psychological aggression	3.65 (.79)	4.62*	.16	2.62 (.81)	3.25*	.08
Physical aggression	-.08 (.87)	-0.09	.00	1.45 (.80)	1.81	.03
Trauma symptoms						
Age	-1.28 (.67)	-1.93	.03	-1.24 (.66)	-1.87	.03
Psychological aggression	2.30 (1.34)	1.72	.03	0.57 (1.35)	0.42	.00
Physical aggression	-0.56 (1.47)	-0.38	.00	2.19 (1.35)	1.63	.02
Depressive symptoms						
Age	-2.45 (.81)	-3.01*	.07	-2.35 (.82)	-2.87*	.07
Psychological aggression	3.11 (1.64)	1.90	.03	.79 (1.67)	.47	.00
Physical aggression	0.81 (1.80)	0.45	.00	2.24 (1.66)	1.35	.02

Note.

* $p < .05$

¹Multivariate results CADRI: Wilks' $\lambda = .84, F(3, 113) = 7.27, p = .001, \eta^2 = .16;$

²Multivariate results RVI: Wilks' $\lambda = .90, F(3, 113) = 4.21, p = .01, \eta^2 = .10.$

Table 3
Correlations Among the Reduced RVI Aggression Variables and Psychological Distress

Variable	1	2	3	4	5	6	7	Mean (SD)
1. Psyc. aggression (unpleasant)	--							0.47 (.50)
2. Phys. aggression (unpleasant)	.19*	--						0.19 (.40)
3. Psyc. aggression (not playful)	.73*	.17	--					0.50 (.50)
4. Phys. aggression (not playful)	.10	.70*	.19*	--				0.10 (.31)
5. Relationship anxiety	.38*	.12	.44*	.18*	--			17.82 (4.60)
6. Trauma symptoms	.09	.07	.15	.09	.54*	--		32.80 (7.02)
7. Depressive symptoms	.17	.10	.13	.13	.43*	.50*	--	34.41 (8.84)

Note. Aggression measures are dichotomized; The appropriate correlation coefficient (e.g., Pearson, point-biserial, phi) was computed for each pair of variables.

* $p < .05$.