CLEARING UP THE HE SAID/SHE SAID OF DATING AGGRESSION: 
A MULTIMETHOD INVESTIGATION OF EXTERNALIZING BEHAVIORS & PSYCHOLOGICAL AGGRESSION 

A thesis submitted 
To Kent State University in partial 
Fulfillment of the requirements for the 
Degree of Master of Arts 

by 
Katherine Marie Klipfel 
May, 2012
Thesis written by
Katherine Marie Klipfel
B.A., Minnesota State University Moorhead, 2009
M.A., Kent State University, 2012

Approved by

Manfred H. M. van Dulmen, Ph.D.  Advisor
Maria S. Zaragoza, Ph.D.  Chair, Department of Psychology
Timothy Moerland, Ph.D.  Dean, College of Arts and Sciences
# TABLE OF CONTENTS

LIST OF TABLES .................................................................................. v
LIST OF FIGURES ................................................................................ vi
ACKNOWLEDGEMENTS ....................................................................... vii

INTRODUCTION ................................................................................ 1
  Psychological Aggression in Dating Relationships ......................... 2
  Externalizing Behavior Problems as a Risk Factor for Psychological Aggression ................................................................. 4
  Developmental Systems Perspective on Externalizing Behaviors and Psychological Aggression ...................................................... 4
  Methodological Issues ...................................................................... 8
  Contributions of Cross-Informant & Multi-Method Data ................. 11
  The Current Study .......................................................................... 13

METHODS .......................................................................................... 16
  Participants .................................................................................... 16
  Measures ....................................................................................... 17
  Procedure ...................................................................................... 20
  Analysis Plan ................................................................................. 21

RESULTS ............................................................................................ 29
  Descriptive T-Tests and ANOVAs .................................................. 29
  Bivariate Correlation ................................................................. 32
LIST OF TABLES

TABLE 1........................................................................................................30

TABLE 2........................................................................................................31
LIST OF FIGURES

FIGURE 1...............................................................25
FIGURE 2...........................................................35
FIGURE 3.........................................................40
FIGURE 4.........................................................45
ACKNOWLEDGEMENTS

I would like to express my gratitude to Dr. Manfred van Dulmen for mentoring me throughout this project. I would also like to thank the members of my committee for their time and assistance in the preparation of this project: Dr. Beth Wildman, Dr. Janis Crowther, and Dr. Kristin Mickelson. I would like to acknowledge my labmates Elizabeth Goncy, Andrea Mata, Katherine Schinka, and Shannon Claxton for their work on the Transitions into Adulthood and Romantic Relationships project, as well as their enduring support. I am forever grateful for my family and friends and their unconditional love, support, and encouragement.
INTRODUCTION

Dating aggression is an important and pressing concern in our society. According to the Centers for Disease Control and Prevention (2010), one in four individuals experiences psychological, physical, or sexual aggression from a dating partner each year. These experiences within non-marital dating relationships have a meaningful impact on individual well-being (e.g. Collins, 2003; van Dulmen, Goncy, Haydon, Collins, 2008). Extant literature suggests that dating aggression is associated with numerous mental health problems (e.g. Ackard & Neumark-Sztainer, 2002; Banyard & Cross, 2008; Klipfel, van Dulmen, Swahn, & Bossarte, 2012; Silverman, Raj, Mucci, & Hathaway, 2001; Wolitzky-Taylor et al., 2008) and negative romantic relationship outcomes (e.g. Smith, White, & Holland, 2003; van Dulmen, Mata, & Klipfel, 2012; for review see Teten, Ball, Valle, Noonan, & Rosenbluth, 2009).

In what follows, psychological aggression is the focus of investigation. I first propose the importance of studying this subtype of dating aggression. Next, the role of externalizing behaviors as a risk factor for psychological aggression within dating couples is discussed. Finally, the limitations of the extant literature in investigating the association between externalizing behaviors and psychological aggression are suggested. The current study, then, aims to investigate the association between self- and cross-informant externalizing behavior problems and self-reported psychological aggression.
perpetration, self-reported psychological aggression victimization, and observed psychological aggression perpetration—disentangling the effects of gender and method of report.

**Psychological Aggression in Dating Relationships**

While psychological, physical, and sexual dating aggression portend significant consequences, it is psychological aggression in particular that is the focus of this paper. In the current study, psychological aggression is defined as “acting in a verbally offending or degrading manner towards another…[that] may take the form of insults or behavior that results in making another feel guilty, upset, or worthless” (Stets, 1991, p. 101). Theorists argue that “aggression” is a more appropriate label than “abuse” when the consequences of experiences have not been assessed (Archer, 1994; Jackson, 1999). Furthermore, others argued that aggression encompasses both lesser and more severe forms of dating aggression (Follingstad, 2007). Thus, this terminology will be adopted for the remainder of the paper.

Psychological aggression is a prevalent problem among dating couples—yet remains a relatively limited area of investigation. Indeed, researchers estimate that psychological aggression impacts as many as 96% of non-married daters (Jezl, Molidor, & Wright, 1996). Moreover, the past year prevalence rate of psychological aggression perpetration among college students has been as high as 83% for females and 80% for males (Shook, Gerrity, Jurich, & Segrist, 2000). Despite these high prevalence rates of psychological aggression, few studies specifically investigate psychological aggression in
non-married samples (e.g. Hanley & O’Neill, 1997; Foshee et al., 2009, Muñoz-Rivas, Graña, O’Leary, & González, 2007; O’Leary & Slep, 2003; Riggs & O’Leary, 1996; Stets, 1991).

The limited amount of research that has been devoted to understanding psychological aggression among dating couples is particularly problematic given that both perpetration and victimization of psychological aggression are associated with a host of detrimental mental health and romantic relationship outcomes. For example, research with victimized women suggests that psychological aggression may be perceived as more damaging than physical abuse (Follingstad et al., 1990; For review see Follingstad, 2007; O’Leary, 1999). Furthermore, women who have experienced psychological aggression tend to stay in aggressive relationships and are less likely to recover from detrimental psychological outcomes over time than those who had experienced other subtypes of abuse (Blasco-Ros, Sánchez-Lorente, & Martinez, 2010). In dating samples, psychological aggression has been linked to concurrent and subsequent physical aggression (O’Leary & Slep, 2003). Furthermore, the few studies that have investigated psychological dating aggression suggest that experiences of psychological aggression perpetration and victimization are associated with anxiety, depression (Holt & Espelage, 2005), and lower self-esteem (Jezl, Molidor, & Wright, 1996), as well as diminished romantic relationship satisfaction (Capaldi & Crosby, 1997).
Externalizing Behavior Problems as a Risk Factor for Psychological Aggression

A significant—as well as prevalent—risk factor for dating aggression perpetration and victimization is externalizing behavior problems (Feldman & Gowen, 1998; Leadbeater, Banister, Ellis, & Yeung, 2008; Woodward, Fergusson, & Horwood, 2002). Externalizing behavior problems are a broad category that includes behaviors such as intrusiveness, aggression, and rule-breaking behaviors (Achenbach & Rescorla, 2003). Research findings indicate that externalizing behavior problems peak in late adolescence and remain a persistent and stable problem into young adulthood (Mata & van Dulmen, 2012). Indeed, aggression generalizes across community and peer domains and spills over into dating aggression perpetration (Ozer, Tschann, Pasch, & Flores, 2004) and victimization (Swahn, Bossarte, & Sullivent, 2008). More specifically, externalizing behaviors are associated with psychological dating aggression perpetration and victimization (Capaldi & Crosby, 1997; Leadbeater et al., 2008).

Developmental Systems Perspective on Externalizing Behaviors and Psychological Aggression

The relationship between externalizing behaviors and psychological aggression is consistent with Capaldi and colleagues’ (e.g. Capaldi, Kim, and Shortt, 2004; Capaldi, Shortt, & Kim, 2005) developmental systems perspective. In this theoretical model, risk factors for dating aggression are incorporated and conceptualized as they develop and occur within dyads. Thus, within this framework (Capaldi, Shortt, & Kim, 2005), behaviors occurring within a couple are an interactive and dynamic process, sensitive to
each partner’s biology (e.g. genetics), socialization processes (e.g. parenting and peer influences), individual developmental characteristics (e.g. temperament), and contextual factors (e.g. socioeconomic status). Based on this model, we expect children who developed externalizing behavior problems (or aggression) in their family of origin to select partners who also evidence externalizing behavior problems (or aggression). When these individuals enter into a dating relationship, contextual factors (e.g. stress, length of romantic relationship) and intrapersonal factors (e.g. cognitive appraisal, poor emotion regulation, impulsivity, externalizing behaviors) then contribute to and confer greater risk for aggressive interactions. Externalizing behaviors may serve as a risk factor for dating aggression, in that individuals high in externalizing behaviors may be ill equipped to deal with stress that may occur within dating relationships. As a result, aggression occurs — rather than more constructive forms of conflict resolution.

Indeed, research bolsters support for the aforementioned theory. For example, in a study of mostly unmarried couples, Capaldi and Crosby (1997) found moderate positive assortment ($r = .44$) among females’ and males’ antisocial behaviors. Moreover, there tends to be a high rate of reciprocal dating aggression—or a high rate of both perpetration and victimization of dating aggression (Whitaker, Haileyesus, Swahn, & Saltzman, 2007). For example, Gray and Foshee (1997) suggested that the rate of self-reported reciprocal dating aggression is as high as 66%. Therefore, individuals may select partners that are similar to themselves in terms of externalizing behavior problems and dating aggression.
Gender Differences in the Association among Externalizing Behavior Problems and Aggression

While research tends to support the developmental systems perspective (Capaldi, Shortt, & Kim, 2005), it is not clear whether gender differences exist. Based on the developmental systems perspective, females and males are likely to display similar correlates and processes in dating aggression. As predicted, then, some studies indicate no meaningful gender differences. For example, findings from a non-dyadic, self-report study suggests that externalizing behavior problems show similar patterns for females and males in predicting psychological aggression (Magdol, Moffitt, Caspi, & Silva, 1998).

However, findings from other studies suggest gender differences in the association between externalizing behaviors and dating aggression. In a dyadic study of at-risk couples, wherein couples were recruited for study participation based on the male partner’s risk for delinquency, Capaldi and Crosby (1997) investigated the relationship between antisocial behaviors (a subset of severe externalizing behavior problems) and psychological aggression perpetration. The indicator for antisocial behaviors was a composite of questionnaire, interview, and arrest record data. The indicator of psychological aggression was a composite of self-report, cross-informant, and observational data. The findings were consistent with positive assortment for antisocial behaviors (r = .44). In regard to the association between antisocial behaviors and
psychological aggression, only males’ antisocial behaviors were associated with their own psychological aggression perpetration.

While the aforementioned studies investigated perpetration, few studies have investigated the association between externalizing behavior problems and dating aggression victimization. I know of no studies that have specifically investigated this association in psychological aggression in particular. However, Maas, Fleming, Herrenkohl, and Catalano (2010) investigated the relationship between externalizing behavior problems and physical aggression victimization in a sample of adolescents between the ages of 16 and 18 years-of-age. Results indicated that externalizing behavior problems were a significant predictor of victimization for males, but the same was not true for females. Therefore, it is likely that the association between externalizing behaviors and dating aggression victimization differs between females and males.

Other studies have confirmed that externalizing behaviors have differential effects on males and females dating aggression—particularly when considering the interactive effects of one’s own externalizing behaviors on one’s partner’s dating aggression. For example, in a dyadic study conducted by Kim and Capaldi (2004), both females and males antisocial behaviors affected their own psychological aggression perpetration concurrently and longitudinally. However, only females showed significant partner effects. This was such that females’ own antisocial behaviors impacted their partner’s psychological aggression perpetration above and beyond their male partner’s antisocial and depressive symptoms alone.
Taken together, it is evident that gender differences may moderate the relationship between externalizing behavior problems and psychological aggression. However, the nature of these gender differences is obscured by method of report. This is such that findings from self-report studies of psychological aggression perpetration suggest that the association between externalizing behavior problems and psychological aggression is similar for females and males (Magdol et al., 1998). However, studies that use multi-method data suggest gender differences. In contrast to self-report studies, Capaldi and Crosby’s (1997) multi-method study suggests that the association between externalizing behavior problems and psychological aggression is limited to males (Capaldi & Crosby, 1997). Similarly, a study that used reports of victimization suggests that the association between externalizing behavior problems and dating aggression is apparent only for males (Maas et al., 2010). In regard to the interactional effects that occur between dating couples, multi-method research suggests that partner effects may be apparent only for females (Kim & Capaldi, 2004). Together, the findings of these studies suggest that the importance of considering multi-method investigations when considering the role of gender differences: single-informant, self-report studies of perpetration alone may not capture potential gender effects.

**Methodological Issues**

Despite the contributions of the aforementioned studies in illuminating the association between externalizing behaviors and psychological aggression, several aspects of this association remain unclear. Specifically, all of the aforementioned studies
rely on non-dyadic data, with the exception of the work of Capaldi and colleagues (e.g. Capaldi & Crosby, 1997; Kim & Capaldi, 2004). The majority of studies, then, rely on individuals self-reporting their own perpetration or victimization on acts scales, such as the Revised Conflict Tactics Scale (CTS-2, Straus, Hamby, Boney-McCoy, & Sugarman, 1996). As a result, most studies on externalizing behaviors and psychological aggression have addressed psychological aggression perpetration rather than victimization. This is problematic because correlates may be disparate between perpetrator and victim status (Malik, Sorenson, & Aneshensel, 1997). Although I am not aware of any studies that have specifically examined dating relationships, findings from research with peer relationships suggests that the relationship between externalizing behavior problems and psychological aggression is stronger for perpetrators than for victims of psychological aggression (Williams, Fredland, Han, Campbell, & Kub, 2009). Furthermore, LeJeune and Follette (1994) demonstrate that people often under-report their own perpetration due to self-preservation biases. Thus, individual self-reports of one’s own perpetration or victimization may fall short of fully capturing relationship processes.

Another limitation of self-report studies is that female self-reports are overly represented in the literature (Pedersen & Thomas, 1992). This is particularly problematic given that females and males may report behaviors differently (Jackson, 1999). The problem of relying on one individual’s self-reports becomes evident when we consider prevalence rates of psychological aggression. The literature on psychological aggression is largely inconclusive, with some literature suggesting that females are more
psychologically aggressive than males (e.g. Foshee, 1996; Owens, Shute, & Slee, 2006), while other literature suggests males and females perpetrate similar levels of psychological aggression (e.g. Jezl, Molidor, & Wright, 1996). Moreover, in one of the few cross-informant studies, Hanley and O’Neill (1997) found significant differences in convergent couples’ reports in comparison with individual reports by either females or males. Thus, we know that self-reports are not equivalent between genders. Therefore, researchers need to cautious in assuming a correct estimate from either party—thereby illustrating the need for independent observation.

In addition, few studies incorporate cross-informant indicators of externalizing behavior problems in young adulthood (see Capaldi and colleagues work for exception). This is problematic in that the predictors of aggression are also associated with underreporting (Szinovacz & Egley, 1995). Indeed, the extant literature on adult romantic relationships suggests that reports from females and males on individual behavioral functioning are only moderately correlated (Achenbach, Krukowski, Dumenci, & Ivanaova, 2005; Caspi, et al., 2001). These moderate correlations may suggest expertise and unique information from each individual, but also may suggest systematic bias (De Los Reyes & Kazdin, 2005) and lack of insight on one’s own behaviors (Kerig, 2001). Therefore, it is beneficial to utilize cross-informant and multi-method assessments of behavior problems (e.g. Achenbach et al., 2005).

Finally, according to the developmental systems perspective (Capaldi, Shortt, & Kim, 2005), behaviors occurring within dating relationships are an interactive process.
Therefore, relying on self-informant reports is limiting in that we are forced to rely on one half of a dyadic relationship to report on a dual-sided and dynamic phenomenon. Specifically, single-informant methods do not allow for the examination of the effects that one’s partner’s characteristics (i.e. externalizing behavior problems) may have in producing relationship outcomes (i.e. psychological aggression).

**Contributions of Cross-Informant & Multi-Method Data**

The utilization of self-report, cross-informant, and independent observations may be a solution to aforementioned problems. Indeed, Offord and colleagues (1996) have argued that the use of multiple indicators results in increased reliability of construct measurement. In regard to cross-informant data, as previously was stated, few studies have included this data (see for exception Capaldi & Crosby, 1997; Kim and Capaldi, 2004). Researchers have suggested that it may be advantageous to include reports from both romantic partners on both their own and their partners’ behaviors (Achenbach et al., 2005; Caspi et al., 2001), as well as independent observations of behaviors (van Dulmen, Mata, and Klipfel, 2012; Welsh & Shulman, 2008). This cross-informant and multi-method data may increase the reliability of the constructs under investigation.

In the studies conducted by Capaldi and colleagues (e.g. Capaldi & Crosby, 1997; Kim and Capaldi, 2004), observational data was utilized. However, antisocial behaviors and psychological aggression were based on composite measures. Antisocial behaviors were a composite of self and cross-informant reports, as well as arrest records. Psychological aggression included self-reported, cross-informant, and observed
psychological aggression as manifest indicators on a latent variable. This means that the effects of self-reports, cross-informant reports, and observations were not parsed out. Given that observations and reports were only moderately correlated, the unique contribution of indicators was not observed. It is also important to note that the study was also conducted in an at-risk sample (i.e. males who were at high risk for delinquency were recruited), and only a subset of externalizing behaviors was measured (i.e. antisocial behaviors). Moreover, only psychological aggression perpetration was assessed. Therefore, it remains to be investigated whether these findings are consistent across multiple individual indicators (self-reports of perpetration and victimization, and observed perpetration) and in a normative sample with the broader category of externalizing behavior problems.

The current study, then, investigates the association between externalizing behavior problems and psychological aggression in a dating sample of late adolescents/young adults. Many studies have not specifically investigated psychological aggression—particularly among dating couples. Therefore, it is important to disentangle this form of dating aggression from physical and sexual subtypes given that there is some evidence to suggest correlates may differ by subtype of abuse (Halpern, Oslak, Young, Martin, Kupper, 2001). Moreover, it is important to study externalizing behaviors more broadly than past literature, given that externalizing behavior problems also include less severe disruptive and destructive behaviors (Shaw and Winslow, 1997). These less severe behaviors are relevant in college samples. For these reasons, I aim to extend past findings
with at-risk samples (e.g. Capaldi & Crosby, 1997; Kim & Capaldi, 2004) to a sample of late adolescent/young adult dating couples.

Finally, this study provides an investigation of the association between externalizing behavior problems and psychological aggression using cross-informant and multi-method data—disentangling the unique effects among indicators. Externalizing behaviors are measured separately (i.e. self-report and cross-informant) for each romantic partner. In addition, psychological aggression is measured several ways (i.e. self-reported acts, self-reported received acts\(^1\); observed aggression). Together, these multiple indicators allow me to examine each indicator’s unique contribution to each unique outcome, and furthermore make possible the investigation of the way in which one’s own characteristics contribute to outcomes of one’s own or one’s romantic partner’s psychological aggression. Moreover, multiple indicators also allow me to investigate the effects of gender and method of measurement. This cross-informant and multi-method study, then, investigates whether the association between externalizing behavior problems and psychological aggression is stable, regardless of informant or method.

**The Current Study**

The aim of this study is to investigate the association between externalizing behavior problems and psychological aggression among non-married dating couples using cross-informant and multi-method data. I clarify several aspects of this association. First (1), I examine the prevalence of externalizing behaviors (1a) and psychological aggression (1b) among dating couples. The terms “actor” or “acts” will be used to in place of perpetration, and “recipient” or “received acts” will be used in place of victimization for the purposes of the current analyses.
aggression (1b) within dyads. Second (2), I examine assortative mating as it occurs among males and females on externalizing behavior problems and psychological aggression, as well as the degree of co-occurrence of acts and received acts of psychological aggression. In accordance with the developmental systems perspective (Capaldi, Shortt, & Kim, 2005), I expect positive assortment for externalizing behavior problems (aim 2a) and psychological aggression (aim 2b). Moreover, I expect high rates of reciprocal aggression (aim 2c; Gray & Foshee, 1997; Whitaker et al., 2007). Third (3), I investigate whether one’s own externalizing behaviors are associated with one’s own or one’s romantic partner’s psychological aggression, regardless of gender or method of report across acts (aim 3a), received acts (aim 3b), and observed aggression (aim 3c). In accordance with the developmental systems model, I hypothesize that one’s own externalizing behaviors are relevant to outcomes of both one’s own and one’s partner’s psychological aggression. Next (4), I investigate whether there are gender differences across acts (aim 4a), received acts (aim 4b), and observed aggression (aim 4c). Given the inconsistencies in the literature (Kim & Capaldi, 2004; Maas et al., 2010), gender differences are expected. Specifically, males are expected to demonstrate a more consistent positive association between their own externalizing behavior problems and their own psychological aggression than females (Capaldi & Crosby, 1997, Maas et al., 2010). In light of Kim and Capaldi’s work (2004), only females are expected to demonstrate partner effects across indicators of psychological aggression. Next (aim 5), I investigate whether the magnitude of the association is consistent across method of
measurement (i.e. self- versus partner- reported externalizing behaviors within genders). Given this study is the first to include multi-informants and multiple methods, I made no specific predictions as to the impact of indicators of externalizing behavior problems and psychological aggression. Finally (aim 6), I explore the association between externalizing behaviors and psychological aggression across multiple methods of measurement (i.e. self-reported psychological aggression acts, self-reported psychological aggression received, and observed psychological aggression). This examination of whether externalizing behaviors are associated with psychological aggression across multiple methods of measurement is exploratory in nature, given the dearth of past literature on the subject.
METHODS

Participants

A total of 120 dating couples were recruited from a large Midwestern state university. This sample was composed of undergraduate psychology students, recruited from a psychology subject pool, and their romantic partners. In order to be eligible for participation, the couples were required to be in a self-defined, exclusive, romantic relationship for at least four months, have no children, and be unmarried. Homosexual couples were excluded from the analysis, as the sample size was limited and the literature indicates that abuse may be expressed differently among heterosexual as compared to homosexual couples (e.g. Freedner, Freed, Yang, & Austin, 2003).

The effective sample size included 113 heterosexual couples, after exclusion of homosexual couples ($n = 4$) and couples whose observational assessment could not be coded due to technical difficulties during the assessment ($n = 3$). Thus, only couples with complete data on the outcome variable of observed psychological aggression were included in analyses. None of the couples were married or engaged, and 7% of couples were cohabitating at the time of study. Twenty-nine percent of the couples had been involved in their current relationship for 4 to 6 months, 19% had been involved in their current relationship for 7 to 12 months, and 52% had been involved in their current relationship for 12 months or longer. The average age of the participants was 19.78
years, and 90% of the sample attended school. The sample was predominantly Caucasian (88%). More specifically, 87% of participants were Caucasian, 7% were African American, 2% were Hispanic, 2% were Biracial, and 2% were classified as other. All procedures were approved in advance by Kent State’s Institutional Review Board (07-226).

Measures

**Demographics.** Participants completed general demographic questionnaires that provided information on participants’ age, ethnicity, educational and employment status, length of current dating relationship, and current living situation.

**Self-reported externalizing behavior problems.** The Adult Self-Report (ASR; Achenbach & Rescorla, 2003) assesses both the participants’ and the partners’ self-reported psychological functioning with 126 items. The ASR uses a 3-point Likert scale (0 = Not true, 1 = Somewhat true or sometimes true, and 2 = Very often or very true). The ASR provides 8 syndrome scores, 6 DSM-oriented scales and 5 scales. Scores on the 35-item broadband Externalizing Scale provided the independent variable of externalizing behavior problems. This externalizing broadband scale contains Aggressive Behavior, Rule-Breaking Behavior, and Intrusive Syndrome narrowband subscales. Research has demonstrated good reliability and validity for the scales of the ASR (Achenbach & Rescorla, 2003). The raw scores demonstrated good internal consistency for both females ($\alpha = .85$) and males ($\alpha = .86$).

**Partner-reported externalizing behavior problems.** The Adult Behavior Checklist (ABCL; Achenbach & Rescorla, 2003) was completed by the each participant
and partner on their significant other. The ABCL corresponds with the ASR and provides the same scales. Again, the 35-item Externalizing broadband scale of the ABCL measured partner-reported externalizing behavior problems. The raw scores demonstrated good internal consistency for both females ($\alpha = .84$) and males ($\alpha = .85$).

**Psychological aggression acts.** The Conflict in Adolescent Dating Relationships Inventory (CADRI, Wolfe et al., 2001) assesses dating aggression acts towards each participant’s current partner over the past year. The 35-item questionnaire is developmentally appropriate for adolescents and contains 5 subscales that assess threatening behaviors, physical abuse, sexual abuse, relational aggression, emotional and verbal abuse, and positive strategies in conflict resolution. Each member of the couple reported on his or her own behaviors toward partner, as well as on his/hers partner’s behaviors towards them for each item on a 4-point Likert scale, wherein 1 represented *never*, 2 represented *seldom* (1-2 occurrences), 3 represented *sometimes* (3-5 occurrences) and 4 represented *often* (6 or more occurrences). Self-reported psychological aggression acts were derived from the 10-item emotional and verbal abuse subscale assessing perpetration. Previous research has demonstrated adequate reliability and validity for the CADRI and the emotional and verbal abuse subscale (Wolfe et al., 2001). The composite scale demonstrated good internal consistency for both females ($\alpha = .87$) and males ($\alpha = .88$).

**Psychological aggression received acts.** The CADRI (Wolfe et al., 2001) assesses dating aggression acts received by each participant’s current partner over the past year. Each member of the couples reported on his/her own behaviors toward partner,
as well as on his/hers partner’s behaviors towards them on a 4-point Likert scale. The recipient variable was derived from the 10-item emotional and verbal abuse subscale assessing victimization (e.g. He/she said things just to make me angry; He/she insulted me with put downs). Previous research has demonstrated adequate reliability and validity for the CADRI and the emotional and verbal abuse subscale (Wolfe et al., 2001). The composite scale demonstrated good internal consistency for both females ($\alpha = .90$) and males ($\alpha = .86$).

**Observed psychological aggression.** Couples participated in an observational assessment that included a conflict resolution task (Markman-Cox, 1991) and a plan-a-weekend-getaway task (modified for dating couples from the family vacation task, Cooper & Grotevant, 1987). Assessments lasted for approximately 45-minutes. The Markham-Cox Couple Interaction Observation Procedure - Revised (Markham-Cox, 1991) involved three tasks: (1) a four minute discussion of the most salient relationship problem, wherein both members of the couple needed to agree on the most troublesome relationship problem; (2) a ten minute conflict resolution task, wherein both members of the couple needed to agree upon a solution to the problem; and (3) a four minute discussion of the most salient relationship strength, wherein both members of the couple discussed the good things about the relationship. This was immediately followed by the modified version of the plan-a-weekend-getaway task (Cooper & Grotevant, 1987), which involved a 10 minute plan a vacation task, wherein the couple planned a dream vacation. The plan-a-vacation task were incorporated as a “cool-down” task, in order to avoid sending couples home upset with their partner.
All observational assessments were coded for psychological aggression based on a coding scheme adapted from the 10-item emotional and verbal abuse subscale of the CADRI (Wolfe et al., 2001; van Dulmen, Mata, & Klipfel, 2012). The final construct consisted of the following four items: blaming one’s partner for a problem, insulting one’s partner with put-downs, saying something to make one’s partner angry, and bringing up something bad that one’s partner did in the past. Similar to the self-report CADRI, each of the observational items was rated on a 4-point Likert scale, wherein ratings ranged from 1-never to 4-often, in regards to the frequency of each abuse’s occurrence over the span of a full observational tape. Observational tapes were coded by trained undergraduate and graduate research assistants at Kent State University. All tapes were coded by at least two coders. Inter-rater reliability (intra-class correlations) for all four items was generally good (said something to make partner angry, \( r = .59 \); insulting, \( r = .76 \); brought up past, \( r = .78 \); blaming, \( r = .81 \)). The scale demonstrated adequate internal consistency for both females (\( \alpha = .61 \)) and males (\( \alpha = .62 \)).

**Procedure**

The Transitions into Adulthood and Romantic Relationship study (TARR) is a multi-method, multi-informant longitudinal study of late adolescents’ romantic relationships. Both individual and dyadic data was collected. As part of Wave 1, romantic couples completed an in-lab assessment, which including individual questionnaire packets and interviews, as well as a video-taped conflict resolution task with their partner. As part of Wave 2, one individual from each couple also completed a 2-week online daily diary of activities. Follow-up online assessments were conducted at both 3
months and 6 months from Wave 1 completion. The findings in this paper are limited to the in-lab questionnaire and observational data.

**Analysis Plan**

**Control variables.** Bivariate tests were conducted to investigate several potential control variables. Pearson correlations revealed that participant age was not significantly associated with the outcome variables. A one-way analysis of variance tests (ANOVA) indicated that ethnicity was not significantly associated with any of the indicators of psychological aggression. Parental education was used as a proxy for socioeconomic status, and neither father’s education status, nor mother’s educational status, was associated with any of the psychological aggression indicators. However, a one-way ANOVA indicated that length of romantic relationship (3-levels: 4-6 months, 7-12 months, and more than 12 months) was positively associated with psychological aggression acts \([F(2,219) = 5.73, p = .004, \text{partial } \eta^2 = .05]\) and received acts \([F(2, 219) = 7.32, p = .001, \text{partial } \eta^2 = .06]\), but not to observed psychological aggression \([F(2, 223) = 2.43, p = .09, \text{partial } \eta^2 = .02]\). In regard to cohabitation status, ANOVAs indicated that only psychological aggression acts \([F(1,213) = 7.25, p = .01, \text{partial } \eta^2 = .03]\) — but not received acts \([F(1, 213) = 2.25, p = .14, \text{partial } \eta^2 = .01]\) or observed psychological aggression \([F(1, 217) = .23, p = .63, \text{partial } \eta^2 < .001]\) — was predicted by cohabitation status. Therefore, length of romantic relationship involvement and cohabitation status was controlled for in all multivariate analyses.

**Statistical analyses.** First, paired-samples t-tests and repeated measure analysis of variance were used to investigate mean differences in levels of externalizing behaviors
and psychological aggression—by gender and by method (aim 1). Next, in order to investigate the association among the variables under investigation, bivariate Pearson correlations were used. Moreover, correlations were used to investigate assortative mating among externalizing behavior problems and psychological aggression (aim 2). Positive assortment was expected for externalizing behavior problems and psychological aggression across indicators.

Next, the Actor Partner Interdependence Model (APIM) was used to investigate the hypotheses of this study in light of several important advantages that make the technique particularly well-suited to dyadic data analysis (Kenny, Kashy, & Cook, 2006). First, this technique allowed me to accommodate the non-independence inherent in dyadic data by treating the couple as the unit of analysis. Next, the APIM technique can accommodate mixed independent variables—variables that vary both within and between dyads. This approach, therefore, makes it possible to disentangle individual outcomes as caused by one’s own characteristics (actor effect) from those due to one’s partner’s characteristics (partner effect) from still others that may be due to both one’s own and one’s partner’s characteristics (couple effect). Moreover, as still another benefit of the APIM technique, the technique has been extended to accommodate cross-informant and multi-method data (see van Dulmen & Goncy, 2010).

More specifically, in terms of the current analyses, an actor-oriented model occurs when actor effects significantly differ from zero while partner effects equal zero (Kenny, Kashy, & Cook, 2006). Therefore, in an actor-oriented model, one’s own externalizing behavior problems predict one’s own psychological aggression outcomes.
Second, in a partner-oriented model, the partner effects significantly differ from zero while actor effects equal zero. Therefore, a partner-oriented model suggests that one’s own externalizing behaviors predict one’s partner’s outcomes of psychological aggression. In a couple-oriented model, actor effects are not significantly different from partner effects; wherein one’s own externalizing behaviors contribute to both one’s own (actor effect) and one’s partner’s (partner effect) psychological aggression outcomes (Kenny, Kashy, & Cook, 2006).

In accordance with APIM procedures outlined by Kenny, Kashy, and Cook (2006), $A$ represents the association between one’s own self-reported externalizing behaviors and one’s own self-reported or observed outcomes of psychological aggression (actor effect, see Figure 1). $P$, then, represents the association between one’s own self-reported externalizing behaviors and one’s partner’s self-reported or observed outcomes of psychological aggression (partner effect, see Figure 1). In addition, cross-informant data has been added as guided by van Dulmen and Goncy (2010). However, this study is novel in that I will extend cross-informant data to the independent variables. Here, cross-informant actor effects ($A^I$; see Figure 1) represent the association between one’s partner’s report of one’s own characteristics (partner-reported externalizing behaviors) and one’s own self-reported or observed individual outcomes (psychological aggression). Cross-informant partner effects ($P^I$; see Figure 1) represent the association between one’s own partner-reported characteristics (partner-reported externalizing behaviors) and one’s

---

2 In a social comparison model, actor and partner effects cancel each other out (Kenny, Kashy, & Cook, 2006). However, this interpretation is not applicable to cross-informant data (van Dulmen & Goncy, 2010), and therefore was not discussed in this paper.
partner’s self-reported or observed individual outcomes (psychological aggression). Therefore, an examination of whether one’s own externalizing behavior problems contribute to either one’s own or one’s partner’s psychological aggression outcomes—regardless of gender or method—are provided by these overall model results (aim 3). I expected that one’s own externalizing behavior problems contribute to both one’s own and one’s partner’s outcomes of aggression across indicators.

*Figure 1.* Example APIM model of externalizing behaviors predicting psychological aggression (intercorrelations among predictor variables constrained).
In addition, the APIM technique allows for the change in model-fit (chi-square) to be used to compare the magnitude of effects. A statistically significant change in chi-square (i.e. significant worsening of model fit) from the model with no equality constraints indicates that either actor or partner effects are statistically different from each other and stronger for one gender or method, whereas a non-statistically significant
change in chi-square (i.e. no change in model-fit) indicates no meaningful difference between gender or method. I used equality constraints to test whether actor or partner effects are stronger for females and males by placing equality constraints on either the actor or partner effects (aim 4). I expected actor effects to be stronger for males and partner effects to be stronger for females. Note, equality constraints were placed in order to isolate whether gender differences are specific to self- or partner-reported externalizing behaviors in predicting psychological aggression. I also used equality constraints to examine the effects of method of report, namely self-reports and cross-informant reports, within genders (aim 5; the difference in magnitude among self- versus cross-informant reports of externalizing behaviors in predicting psychological aggression within each gender).

Given that APIM models provide just-identified models rendering model-fit tests useless, it is necessary to constrain some of the intercorrelations –thereby freeing up parameters– so that the change in model fit (chi-square) can be assessed. These fit indices make the comparison between models possible. Thus, it is important to note that equality constraints are included on the intercorrelations on the independent variables of externalizing behavior problems. The initial measurement model included only the correlations among the variables \( \chi^2 (8) = 24.82, p = .22 \), and this model was not significantly worsened with the addition of sequential constraints on the correlation among male and female self-and partner-reported externalizing behaviors: constraint 1 \( \chi^2 (9) = 26.57, p = .22; \Delta \chi^2 (1) = 1.75; \) see Figure 1, constraint 2 \( \chi^2 (10) = 26.60, p = .22; \Delta \chi^2 (1) = .03; \) See Figure 1, and constraint 3 \( \chi^2 (11) = 29.74, p = .22; \Delta \chi^2 (1) = 3.14; \)
see Figure 1]. This suggests that the magnitude among these effects is not different across actor and partner effects for females and males, and therefore are constrained without violating assumptions of the analyses.

In summary, using path analysis techniques, I followed procedures outlined by Kenny, Kashy, and Cook (2006) for the Actor-Partner Interdependence Model (APIM; see Figure 1), with the addition of cross-informant data on the independent variable (externalizing behavior problems). Three separate models were conducted for the outcome indicators of psychological aggression (aim 6; self-reported acts, self-reported received acts, and observed aggression). While I expected there to be discrepancies across indicators, I made no specific hypotheses. Analyses were conducted in Mplus (Muthén & Muthén, 2007), and data was structured at the dyad level. Less than 4% of the data was missing on any one variable; this data was estimated using Mplus’s default maximum likelihood estimation. It is important to note that equality constraints were included on the predictor variables (externalizing behavior problems) in all analyses. Moreover, length of romantic relationship and cohabitation status were controlled for in all analyses. Finally, unstandardized coefficients are reported because “the safest course of action is … to report the unstandardized coefficients” (Kenny, Kashy, Cook, 2006, p. 179).

**Statistical power.** In order to ensure the recommended .80 power (Cohen, 1992) to reject the null hypothesis was provided by our sample of 113 couples, the recommendations of Kenny, Kashy, and Cook (2006) were considered. Given that the current sample exceeded the typical recommendation of 80 dyads for APIM models
(Kenny, Kashy, & Cook, 2006), the sample provided adequate power to reject the null hypothesis for even somewhat small effects.
RESULTS

Descriptive T-Tests and ANOVAs

Prevalence. Externalizing behavior problems were endorsed by the majority of the sample. Among females, 99.1% of the sample endorsed at least one item on the self-reported externalizing behavior subscale. For males, 97.3% of the sample endorsed at least one item on the self-reported externalizing behavior subscale. Considering cross-informant reports, female partner-reported externalizing behaviors were reported by 95.6% of the males in the sample. Male partner-reported externalizing behaviors were reported by 95.5% of the females in the sample. When average scores were examined, both females’ and males’ exhibited average levels of externalizing behavior problems. This was such that both females ($M = 53.14, SD = 9.95$) and males ($M = 53.89, SD = 10.11$) exhibited average levels of self-reported externalizing behavior problems (as compared to normed T-scores). Similarly, females ($M =53.02, SD = 8.36$) and males ($M = 51.95, SD = 8.60$) displayed an average level of partner-reported externalizing behavior problems. Thus, females and males exhibited average levels of externalizing behavior problems in comparison to the normative population (aim 1a).

Psychological aggression was reported by the vast majority of the sample (aim 1b, see Table 1). This was such that 96.4% of females self-reported at least one act of psychological aggression in the previous year. For males, 91.9% of the sample self-reported at least one act of psychological. In regard to self-reported acts received, 92.8%
of females and 90.1% of males received at least one incident of psychological aggression in the past year. For observed psychological aggression, 96.5% of females and 90.3% of males were observed to perpetrate at least one act of psychological aggression at the time of observation.

Table 1

Frequencies of Mean Scores on Self-Reported Psychological Aggression Perpetration, Victimization, and Observed Perpetration (N = 113)

<table>
<thead>
<tr>
<th></th>
<th>1.00-1.40</th>
<th>1.50-1.90</th>
<th>2.00-2.40</th>
<th>2.50-2.90</th>
<th>3.00-3.40</th>
<th>3.50-4.00</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Female Aggression Perpetration</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>26</td>
<td>27</td>
<td>10</td>
<td>6</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>valid %</td>
<td>23.4</td>
<td>24.3</td>
<td>9.0</td>
<td>5.4</td>
<td>3.0</td>
<td>2.7</td>
</tr>
<tr>
<td><strong>Male Aggression Perpetration</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>44</td>
<td>13</td>
<td>16</td>
<td>5</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>valid %</td>
<td>39.6</td>
<td>11.7</td>
<td>14.4</td>
<td>4.5</td>
<td>1.0</td>
<td>0.9</td>
</tr>
<tr>
<td><strong>Female Aggression Victimization</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>30</td>
<td>28</td>
<td>11</td>
<td>4</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>valid %</td>
<td>27.0</td>
<td>25.2</td>
<td>9.9</td>
<td>3.6</td>
<td>1.0</td>
<td>0.9</td>
</tr>
<tr>
<td><strong>Male Aggression Victimization</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>41</td>
<td>17</td>
<td>11</td>
<td>10</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>valid %</td>
<td>36.9</td>
<td>15.3</td>
<td>9.9</td>
<td>9.0</td>
<td>2.0</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>Female Observed Aggression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>14</td>
<td>33</td>
<td>25</td>
<td>8</td>
<td>7.1</td>
<td>1.0</td>
</tr>
<tr>
<td>valid %</td>
<td>12.4</td>
<td>29.2</td>
<td>22.1</td>
<td>7.1</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td><strong>Male Observed Aggression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>27</td>
<td>26</td>
<td>15</td>
<td>11</td>
<td>9.7</td>
<td>1.0</td>
</tr>
<tr>
<td>valid %</td>
<td>23.9</td>
<td>23.0</td>
<td>13.3</td>
<td>9.7</td>
<td>0.9</td>
<td></td>
</tr>
</tbody>
</table>

*Note. 1 = Never. This has never happened in your relationship. 2 = Seldom. This has happened only 1-2 times in your relationship. 3 = Sometimes. This has happened about 3-5 times in your relationship, 4 = Often. This has happened 6+ times or more in your relationship.*

**Gender.** In order to describe mean differences among genders, a series of paired-samples t-tests were conducted. For externalizing behavior problems, females and males did not significantly differ in terms of raw scores of self-reported externalizing behavior problems \[t(112) = -1.72, p = .09, d = 0.21; \text{see Table 2}.\] Females’ and males’ partner-reported levels of externalizing behavior problems did not significantly differ \[t(111) = \]
In regard to psychological aggression, females reported significantly more acts of psychological aggression than did males \[ t(108) = 2.38, p = .02, d = 0.23; \text{see Table 2} \]. Females and males did not significantly differ in terms of self-reported received acts of psychological aggression \[ t(108) = 0.03, p = .98, d = 0.00; \text{see Table 2} \]. Females were observed to engage in significantly more psychological aggression than males \[ t(112) = 3.00, p = .01, d = 0.26; \text{see Table 2} \].

Table 2

Means, Standard Deviations, and Correlations of Study Variables (\(N = 113\))

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Female Aggression Acts</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.92 (.60)</td>
</tr>
<tr>
<td>2. Male Aggression Acts</td>
<td>.54***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.78 (.63)</td>
</tr>
<tr>
<td>3. Female Aggression Received Acts</td>
<td>.93***</td>
<td>.58***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.85 (.59)</td>
</tr>
<tr>
<td>4. Male Aggression Received Acts</td>
<td>.62***</td>
<td>.92***</td>
<td>.65***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.08 (.70)</td>
</tr>
<tr>
<td>5. Female Observed Aggression</td>
<td>.28**</td>
<td>.34***</td>
<td>.31**</td>
<td>.42***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.92 (.63)</td>
</tr>
<tr>
<td>6. Male Observed Aggression</td>
<td>.32***</td>
<td>.28**</td>
<td>.33***</td>
<td>.27**</td>
<td>.52***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td>1.85 (.59)</td>
</tr>
<tr>
<td>7. Female Self-Reported Externalizing</td>
<td>.44***</td>
<td>.15</td>
<td>.40***</td>
<td>.26**</td>
<td>.34***</td>
<td>.29**</td>
<td>-</td>
<td></td>
<td></td>
<td>11.87 (8.60)</td>
</tr>
<tr>
<td>8. Male Self-Reported Externalizing</td>
<td>.32**</td>
<td>.42***</td>
<td>.35***</td>
<td>.47***</td>
<td>.21*</td>
<td>.14</td>
<td>.12</td>
<td>-</td>
<td></td>
<td>13.81 (9.56)</td>
</tr>
<tr>
<td>9. Female Partner-Reported Externalizing</td>
<td>.49***</td>
<td>.58***</td>
<td>.49**</td>
<td>.67***</td>
<td>.44***</td>
<td>.40***</td>
<td>.47***</td>
<td>.52***</td>
<td>-</td>
<td>11.33 (9.43)</td>
</tr>
<tr>
<td>10. Male Partner-Reported Externalizing</td>
<td>.52***</td>
<td>.15</td>
<td>.55***</td>
<td>.22*</td>
<td>.30**</td>
<td>.32***</td>
<td>.65***</td>
<td>.31**</td>
<td>.32**</td>
<td>10.42 (9.04)</td>
</tr>
</tbody>
</table>

**Method of report.** Next, to describe mean differences obtained among method of report, a series of paired-samples t-tests and repeated measures analysis of variances (ANOVAs) were conducted. For females, self-reported levels of externalizing behavior
problems did not significantly differ from their levels of partner-reported externalizing behavior problems \[t(112) = 0.62, p = .54, d = 0.06; \text{see Table 2}\]. For males, self-reported levels of externalizing behavior problems were significantly greater than their levels of partner-reported externalizing behavior problems \[t(111) = 3.41, p = .001, d = 0.38; \text{see Table 2}\]. One-way repeated-measures ANOVA tests with Greenhouse-Geisser corrections were conducted to describe within gender differences in psychological aggression by method of measurement. In regard to psychological aggression among females, the mean scores for psychological aggression were significantly different depending on the method of measurement \[F(1.88, 203.40) = 7.84, p = .001, \text{Partial } \eta^2 = .07\]. Post hoc tests using the Bonferroni correction revealed that self-reported psychological aggression acts did not significantly differ from their partner’s self-reported received acts \(p = .24; \text{see Table 2}\). However, female observed psychological aggression was significantly greater than self-reported psychological aggression acts \(p = .01; \text{see Table 2}\) and their partner’s self-reported received acts \(p < .001; \text{see Table 2}\).

For males, the mean levels of psychological aggression were not significantly different depending on the method of measurement \[F(1.81, 195.16) = 2.72, p = .07, \text{Partial } \eta^2 = .03\].

**Bivariate correlations**

Bivariate Pearson correlations, means, and standard deviations for all variables are presented in Table 2. All study variables were significantly \(p<.05\) correlated with each other except for male self-reported externalizing behavior problems with female self-reported externalizing behavior problems, male self-reported externalizing problems
and male observed psychological aggression, male partner-reported externalizing behavior problems and male psychological aggression acts, and female self-reported externalizing and male psychological aggression acts. Correlations ranged from $r = .12$ ($p = .20$; male self-reported externalizing behavior problems and female self-reported externalizing behavior problems) to $r = .93$ ($p < .001$; female psychological aggression acts and female psychological aggression received acts).

**Aim 2: assortative mating & reciprocal aggression.** While bivariate Pearson correlations were not indicative of assortment on self-reported externalizing behavior problems ($r = .12, p = .20$), the predicted significant positive assortment was found among partner-reported externalizing behavior problems ($r = .32, p = .001$; Aim 2a). In addition, positive assortment was found for psychological aggression acts ($r = .54, p < .001$) and received acts ($r = .65, p < .001$), as well as observed psychological aggression ($r = .52, p < .001$; Aim 2b). Finally, it is important to note that one’s own received acts of psychological aggression were associated with both self-reported psychological aggression acts for females ($r = .93, p < .001$) and males ($r = .92, p < .001$) and observed psychological aggression for females ($r = .31, p = .001$) and males ($r = .27, p = .004$) —suggesting that acts and received acts were a co-occurring phenomenon as was predicted (Aim 2c). Means and standard deviations are presented in Table 2.

**APIM Models**

The results of the APIM models are described for each model. The first model presented focuses on the association between externalizing behavior problems and self-reported acts of psychological aggression. The second model presented focuses on the
association between externalizing behavior problems and self-reported received acts of psychological aggression. The last model presented focuses on the association between externalizing behavior problems and observed psychological aggression. For each model, overall results are presented for the association between externalizing behavior problems and psychological aggression—indicating whether it is one’s own externalizing behaviors that affect one’s own (actor effect), one’s partner’s (partner effect), or both one’s own and one’s partner’s (couple effect) psychological aggression. Next, model results are presented when equality constraints are included. The equality constraints that test the magnitude of gender effects are presented first (aim 4), followed by equality constraints that test the magnitude of the effects of method of report (aim 5). Summaries of model results are presented at the conclusion of each model discussion. A summary of findings across indicators of psychological aggression is presented in the discussion (aim 6).

**Externalizing behavior problems and acts of psychological aggression (Aim 3).** The results of the baseline model with equality constraints on the intercorrelations among the predictor variables (externalizing behavior problems) are presented in Figure 2. This model represented the data well [$\chi^2 (3) = 5.38$, $p = .15$; $CFI = .98$; $RMSEA = 0.08$]. This model explained 43% of the variance in females’ self-reported acts of psychological aggression and 44% of the variance in males’ self-reported acts of psychological aggression.
Figure 2. Baseline APIM model of externalizing behaviors predicting acts of psychological aggression, controlling for length of romantic relationship and cohabitation status. Standardized effects reported and intercorrelations among predictor variables constrained, \( N = 113 \)

Note. * \( p < .05 \), ** \( p < .01 \), *** \( p < .001 \). Model Fit: \( \chi^2 (3) = 5.38, p = .15; \) CFI = .98; RMSEA = 0.08.
While female self-reported externalizing behavior problems were not significantly associated with female acts of psychological aggression ($\beta = .03, B = .00, SE = .01, p = .76$), female partner-reported externalizing behavior problems were positively associated with female acts of psychological aggression ($\beta = .30, B = .02, SE = .01, p = .003$). In regard to partner effects, female self-reported externalizing behavior problems were not significantly associated with male acts of psychological aggression ($\beta = -.12, B = -.01, SE = .01, p = .27$), but female partner-reported externalizing behavior problems were positively associated with male acts of psychological aggression ($\beta = .50, B = .03, SE = .01, p < .001$). Together, these findings suggest the association between female externalizing behavior problems and acts of psychological aggression is primarily couple-oriented, but this association is dependent on who provides the information (i.e. partner reports).

For males, male self-reported ($\beta = .20, B = .01, SE = .01, p = .03$), but not partner-reported ($\beta = -.01, B = -.001, SE = .01, p = .93$), externalizing behavior problems were significantly associated with male acts of psychological aggression. In terms of partner effects, male self-reported externalizing behavior problems were not significantly associated with female acts of psychological aggression ($\beta = .06, B = .00, SE = .01, p = .54$), whereas male partner-reported externalizing behavior problems were positively associated with female acts of psychological aggression ($\beta = .37, B = .02, SE = .01, p < .001$). Taken together, these findings suggest the association between male externalizing behavior problems and acts of psychological aggression is primarily couple-oriented, but this association is dependent on who provides the information. Based on the results for
females and males, aim 3a is partially supported, in that associations are evident among one’s externalizing behaviors in predicting one’s own and one’s partner’s acts of psychological aggression—though this association depends on gender and method.

**Aim 4: gender differences.** In regard to gender differences, I tested whether the effects $A$ and $P$, as well as $A^I$ and $P^I$, significantly differed by gender (Figure 2). Equality constraints indicated that the magnitude of self-reported actor effect [$\chi^2(4) = 6.79, p = .15; \Delta \chi^2(1) = 1.41$] or partner effect [$\chi^2(4) = 7.16, p = .13; \Delta \chi^2(1) = 1.78$] did not differ for females and males. Placing equality constraints on both the actor and partner effects cross-informant pathways indicated a significant difference in the magnitude of partner-reported actor effects [$\Delta \chi^2(4) = 9.99, p = .04; \Delta \chi^2(1) = 4.61$] but not partner-reported partner effects [$\chi^2(4) = 6.56, p = .16; \Delta \chi^2(1) = 1.18$]. These results suggest that for cross-informant data, females’ and males’ psychological aggression was differentially impacted by their own level of externalizing behaviors (i.e. actor effect). This was such that actor effects for partner-reports were significantly stronger for females as compared to males. Thus, aim 4a is partially supported, in that gender differences are only evident among the association between one’s own externalizing behavior problems and one’s own acts of psychological aggression (actor effect)—though these gender differences are apparent only in cross-informant data.

**Aim 5: effects of method.** In regard to the effect of method of report among females, I tested whether the effects $A$ and $P$, as well as $A^I$ and $P^I$, significantly differed by self- and partner-reported indicators (Figure 2). Equality constraints did not indicate a significant difference in terms of the magnitude of females’ [actor effect, $\chi^2(4) = 7.39$, $p$
and partner-reported externalizing behavior problems in association with their own psychological aggression. In terms of partner effects, there was a significant difference in the magnitude of females’ [partner effect, $\chi^2(4) = 9.35, p = .01; \Delta \chi^2(1) = 3.97$] and males’ [$\chi^2(4) = 16.57, p = .002; \Delta \chi^2(1) = 11.19$] self- and partner-reported externalizing behaviors in association with their partners’ acts of psychological aggression. Therefore, the method of report (i.e. self- versus partner- reports) impacted the magnitude of the relationship between both females’ and males’ externalizing behaviors and their partner’s psychological aggression—such that cross-informant reports drove the partner effects. Therefore, aim 5a is partially supported in that the method of report produced significant differences among the association between externalizing behavior problems and acts of psychological aggression—though gender differences are apparent.

In summary, results suggest that females’ and males’ externalizing behavior problems are associated with both their own and their partner’s acts of psychological aggression, though these effects are influenced by gender and method. This is such that only females’ partner-reported externalizing behavior problems are associated with their own psychological aggression, while only males’ self-reported externalizing behavior problems are associated with their own psychological aggression. For partner effects, only female and male partner-reported externalizing behavior problems are associated with their partners’ psychological aggression. Significant gender differences are evident, however, in that cross-informant actor effects are significantly stronger for females as compared to males. Moreover, method of report significantly impacts the magnitude of
the relationship between both females’ and males’ externalizing behaviors and their partner’s psychological aggression—such that cross-informant reports drive the partner effects for females and males.

Externalizing behavior problems and received acts of psychological aggression (Aim 3). The results of the baseline model with equality constraints on the intercorrelations among the predictor variables (externalizing behavior problems) are presented in Figure 3. This model represented the data well $[\chi^2(3) = 5.31, p = .15; \text{CFI} = .99; \text{RMSEA} = 0.08]$. This model explained 46% of the variance in females’ self-reported received acts of psychological aggression and 56% of the variance in males’ self-reported received acts of psychological aggression.
Figure 3. Baseline APIM model of externalizing behaviors predicting received acts of psychological aggression, controlling for length of romantic relationship and cohabitation status. Standardized effects reported and intercorrelations among predictor variables constrained, \( N = 113 \).

Note. * \( p < .05 \), ** \( p < .01 \), *** \( p < .001 \). Model Fit: \( \chi^2 (3) = 5.31, p = .15 \); CFI = .99; RMSEA = 0.08.
For females, female self-reported externalizing behaviors were not significantly associated with female received acts of psychological aggression ($\beta = -.09, B = -.01, SE = .01, p = .40$), but female partner-reported externalizing behavior problems were positively associated with female received acts of psychological aggression ($\beta = .35, B = .02, SE = .01, p < .001$). For partner effects, female self-reported externalizing behavior problems were not significantly associated with male received acts of psychological aggression ($\beta = -.02, B = -.002, SE = .01, p = .81$), but female partner-reported externalizing behavior problems were significantly associated with male received acts of psychological aggression ($\beta = .54, B = .04, SE = .01, p < .001$). Together, these findings suggest the association between female externalizing behavior problems and received acts of psychological aggression is primarily couple-oriented, but this association is dependent on who provides the information (i.e. cross-informant reports).

For males, self-reported ($\beta = .23, B = .02, SE = .01, p = .01$), but not partner-reported ($\beta = -.02, B = -.002, SE = .01, p = .82$), externalizing behavior problems were positively associated with male received acts of psychological aggression. In terms of partner effects, male self-reported externalizing behavior problems were not significantly associated with female received acts of psychological aggression ($\beta = .06, B = .004, SE = .01, p = .52$). However, partner-reported externalizing behavior problems were significantly associated with female received acts of psychological aggression ($\beta = .47, B = .03, SE = .01, p < .001$). Together, these findings suggest the association between male externalizing behavior problems and received acts of psychological aggression is primarily couple-oriented, but this association is dependent on who provides the
information. Therefore, based on the results for females and males, aim 3b is partially supported, in that associations are evident among both one’s own externalizing behaviors in predicting one’s own and one’s partner’s received acts of psychological aggression—though this association depends on gender and method.

**Aim 4: gender differences.** In regard to self-reported gender differences, equality constraints indicated that males and females significantly differed in terms of self-reported actor effects \[\chi^2(4) = 12.23, p = .02; \Delta\chi^2(1) = 6.92\], but not in terms of self-reported partner effects \[\chi^2(4) = 5.69, p = .22; \Delta\chi^2(1) = 0.38\]. Thus, for self-reports, females’ and males’ psychological aggression was differentially impacted by one’s own externalizing behaviors (actor effect). This was such that an actor effect was apparent only for males. In terms of cross-informant gender differences, equality constraints indicated males and females significantly differed in terms of cross-informant actor effects \[\chi^2(4) = 12.44, p = .01; \Delta\chi^2(1) = 7.13\], but not in terms of cross-informant partner effects \[\chi^2(4) = 6.73, p = .15; \Delta\chi^2(1) = 1.42\]. Therefore, females’ and males’ psychological aggression was differentially impacted by one’s own externalizing behaviors (actor effect). This was such that an actor effect was apparent only for females. Taken together, aim 4b is partially supported, in that gender differences are evident among the association between one’s own externalizing behavior problems and one’s own received acts of psychological aggression—though these gender differences are influenced by method.

**Aim 5: effects of method.** In regard to the effects of method of report among females, equality constraints indicated a significant difference in terms of the magnitude
of females’ self- and partner-reported externalizing behavior problems in association with their own received acts of psychological aggression [actor effect, $\chi^2(4) = 11.35, p = .02; \Delta \chi^2(1) = 6.04$], though this effect was not significant for males [$\chi^2(4) = 8.20, p = .08; \Delta \chi^2(1) = 2.89$]. These results suggest that among actor effects for females, psychological aggression was impacted by method of report of externalizing behavior problems, such that only cross-informant actor effects were significant for females. In terms of partner effects, equality constraints indicated a significant difference in terms of the magnitude of females’ [$\chi^2(4) = 12.42, p = .01; \Delta \chi^2(1) = 7.11$] and males’ [$\chi^2(4) = 16.60, p = .002; \Delta \chi^2(1) = 11.29$] self- and partner-reported externalizing behaviors in association with their partners’ received acts of psychological aggression. Therefore, the method of report affected the magnitude of the relationship between both females’ and males’ externalizing behaviors and their partner’s received acts of psychological aggression —such that partner-reports drove the partner effects. Therefore, aim 5b is partially supported in that the method of report produces meaningful differences among the association between externalizing behavior problems and received acts of psychological aggression—though gender differences are apparent.

In summary, results suggest that females’ and males’ externalizing behavior problems are associated with both their own and their partner’s received acts of psychological aggression, though these effects are influenced by gender and method. This is such that only females’ partner-reported externalizing behavior problems are associated with their own received acts of psychological aggression, while only males’ self-reported externalizing behavior problems are associated with their own received acts of
psychological aggression. For partner effects, only female and male partner-reported externalizing behavior problems are associated with their partner’s received acts of psychological aggression. Significant gender differences are evident, however, in that self-reported actor effects are significantly stronger for males as compared to females. In contrast, cross-informant actor effects are significantly stronger for females as compared to males. Furthermore, method of report significantly impacts the magnitude of the association between both externalizing behaviors and psychological aggression—such that cross-informant reports drive the actor effects for females, as well as the partner effects for females and males.

**Externalizing behavior problems and observed psychological aggression**

*(Aim 3)*. The results of the baseline model with equality constraints on the intercorrelations among the predictor variables (externalizing behavior problems) are presented in Figure 4. This model represented the data well \[\Delta \chi^2(3) = 5.45, p = .14; \text{CFI} = .97; \text{RMSEA} = 0.09\]. This model explained 21% of the variance in females’ observed psychological aggression and 24% of the variance in males’ observed psychological aggression.
Figure 4. Baseline APIM model of externalizing behaviors predicting observed psychological aggression, controlling for length of romantic relationship and cohabitation status. Standardized effects reported and intercorrelations among predictor variables constrained, $N = 113$.

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Model Fit: $\chi^2(3) = 5.45, p = .14$; CFI = .97; RMSEA = 0.09.
While female self-reported externalizing behavior problems were not significantly associated with females’ observed psychological aggression ($\beta = .08, B = .01, SE = .01, p = .53$), female partner-reported externalizing behavior problems were positively associated with females’ observed psychological aggression ($\beta = .39, B = .02, SE = .01, p = .001$). For partner effects, female self-reported externalizing behavior problems were not significantly associated with males’ observed psychological aggression ($\beta = -.12, B = -.01, SE = .01, p = .34$). However, female partner-reported externalizing behavior problems were positively associated with males’ observed psychological aggression ($\beta = .51, B = .03, SE = .01, p < .001$). Together, these findings suggest the association between female externalizing behavior problems and observed psychological aggression is primarily couple-oriented, but this association is dependent on who provides the information (i.e. partner reports).

For males, however, male self-reported externalizing behavior problems were negatively associated with males’ observed psychological aggression ($\beta = -.23, B = -.01, SE = .01, p = .04$). Conversely, male partner-reported externalizing behavior problems were positively associated with males’ observed psychological aggression ($\beta = .32, B = .02, SE = .01, p = .01$). In regard to partner effects, neither male self-reported ($\beta = -.05, B = -.003, SE = .01, p = .65$) nor male partner-reported ($\beta = .13, B = .01, SE = .01, p = .27$) externalizing behavior problems were significantly associated with females’ observed psychological aggression. Together, these findings suggest the association between male externalizing behavior problems and observed psychological aggression is primarily actor-oriented, but the direction of this association is dependent on who provides the
information (i.e. self or partner reports). Therefore, based on results from females and males, aim 3c is partially supported, in that associations are evident among one’s own externalizing behaviors in predicting both one’s own and one’s partner’s observed psychological aggression — though this association depends on gender and method.

**Aim 4: gender differences.** In regard to gender differences, equality constraints indicated females and males did not significantly differ in terms of self-reported actor effect [$\chi^2(4) = 9.17, p = .06; \Delta \chi^2(1) = 3.72$] or partner effect [$\chi^2(4) = 5.76, p = .22; \Delta \chi^2(1) = -0.31$]. Placing equality constraints on both the actor and partner effects cross-informant pathways did not indicate a statistically significant difference in the magnitude of cross-informant actor effects [$\chi^2(4) = 5.52, p = .24; \Delta \chi^2(1) = 0.07$], but females and males significantly differed in terms of cross-informant partner effects [$\chi^2(4) = 11.47, p = .02; \Delta \chi^2(1) = 6.02$]. These results suggest that females’ and males’ psychological aggression was differentially impacted by their partners’ partner-reported externalizing behaviors (partner effect). This was such that partner effects were only apparent for females. Thus, aim 4c is partially supported, in that gender differences are evident among the association between one’s own externalizing behavior problems and one’s partner’s observed psychological aggression — though method of report impacts these gender differences.

**Aim 5: effects of method.** In regard to the effect of method of report among females, equality constraints indicated no significant difference in terms of the magnitude of females’ self- or partner-reported externalizing behavior problems in association with their own observed psychological aggression [actor effect, $\chi^2(4) = 7.38, p = .12; \Delta \chi^2(1) =
1.93]. However, for males, equality constraints indicated a significant difference in terms of the magnitude of males’ self- and partner-reported externalizing behavior problems actor effect \( \chi^2 (4) = 13.51, p = .01; \Delta \chi^2 (1) = 8.06 \). These results suggest that, for males, observed psychological aggression was differentially impacted by self-reported versus cross-informant externalizing behavior problems—this was such that the direction of the association changed depending on the method of report. In terms of partner effects, neither females \( \chi^2 (4) = 6.39, p = .17; \Delta \chi^2 (1) = 0.94 \) nor males \( \chi^2 (4) = 14.06, p = .01; \Delta \chi^2 (1) = 8.61 \) significantly differed in terms of self-reported or partner-reported externalizing behavior problems in association with their partners’ observed psychological aggression. Therefore, aim 5c is partially supported in that the method of report produces meaningful differences among the association between externalizing behavior problems and observed psychological aggression—though gender differences are apparent.

In summary, results suggest that females’ and males’ externalizing behavior problems are associated with both their own and their partner’s observed psychological aggression, though these effects are influenced by gender and method. This is such that only females’ partner-reported externalizing behavior problems are associated with their own observed psychological aggression, while both males’ self-reported and partner-reported externalizing behavior problems are associated with their own observed psychological aggression. In regard to partner effects, only female partner-reported externalizing behavior problems are associated with their partner’s observed psychological aggression. Significant gender differences are evident, in that cross-
informant partner effects are significantly stronger for females as compared to males. Moreover, method of report significantly impacts the magnitude of the relationship between males’ externalizing behavior problems and their own received acts of psychological aggression, such that self-report actor effects indicate a negative association, whereas cross-informant actor effects indicate a positive association, between externalizing behavior problems and observed psychological aggression.
DISCUSSION

The current findings contribute to the extant literature on externalizing behavior problems and dating aggression in several important ways. First, as was foreshadowed by the work of Capaldi and Crosby (1997), this study confirms that higher levels of externalizing behavior problems are associated with greater frequency of engagement in dating aggression. More specifically, however, this study suggests that this positive association persists when extended to externalizing behaviors broadly conceptualized and to one subtype of dating aggression in particularly—namely psychological aggression. This association held across several, but not all, methods/indicators. Thus, consistent with Capaldi, Shortt, and Kim’s (2005) theory, externalizing behavior problems increase risk for dating aggression. Therefore, externalizing behavior problems should be considered as an important and relevant correlate of psychological aggression; psychological aggression should furthermore be considered a significant subtype of dating aggression, prone to the common influence of externalizing behavior problems.

Second, it important to note the high prevalence rates of externalizing behavior problems (aim 1a) and psychological aggression (aim 1b) that have been documented in the previous literature were confirmed in this study (Capaldi & Stoolmiller, 1999; Jezl, Molidor, & Wright, 1996; Muñoz-Rivas et al., 2007). While at least one symptom of externalizing behavior problems was endorsed by the majority of the sample, both
females’ and males’ average level of externalizing behavior problems were consistent with prevalence rates found in normative samples. In regard to psychological aggression, experiences of aggression were nearly universal across genders and indicators of aggression. Therefore, consistent with the larger literature (e.g. Jezl, Molidor, & Wright, 1996; Muñoz-Rivas et al., 2007), the rate of aggression is high in this sample of young adults. It is important to note, however, that the frequency with which acts of psychological aggression occurred was low (see Table 1).

This study also contributes to the extant literature by reporting mean differences among gender and method of report. Females and males evidenced similar levels of externalizing behavior problems across both self- and partner- reports. However, levels of psychological aggression were discrepant across method, such that females self-reported and were observed to engage in more psychological aggression than males. This may reflect males’ greater willingness to report received acts than committed acts due to self-preservation biases—particularly in light of the stigma that is attached to acts of male aggression (LeJeune & Follette, 1994). In regard to method of report, females’ self- and partner- reported externalizing behavior problems were similar, though males’ self-reported levels of externalizing behavior problems were significantly greater than their levels of partner-reported externalizing behavior problems. This may suggest that males’ more readily endorse externalizing problems given that externalizing symptoms tend to be more acceptable in males (Jane, Oltmanns, South, & Turkheimer, 2007), or that there is a level of expertise in males’ self-reported externalizing behaviors in comparison to females cross-informant reports. In regard to psychological aggression, the average level
of psychological aggression was significantly different depending on the method of measurement. Females, in particular, evidenced discrepancies in that they were observed to engage in more acts of psychological aggression when compared to their self-reported acts or received acts of aggression. In contrast, the average level of psychological aggression was similar across all methods of measurement for males. Therefore, the discrepancy in the prevalence rates of psychological aggression that is documented in the extant literature (e.g., Foshee, 1996; Jezl, Molidor, & Wright, 1996; Owens, Shute, & Slee, 2006) may be driven by the indicator of dating aggression that is utilized or the gender of the informant.

Consistent with the work of Capaldi and Crosby (1997), moderate assortative mating was revealed for externalizing behavior problems and psychological aggression—though this assortment was limited to partner-reported externalizing behavior problems only—underscoring the importance of collecting partner reports of externalizing behavior problems (aim 2a). Again, this may be the result of self-preservation biases that often plague self-reports (Collett, Ohan, & Myers, 2003). In addition, moderate to high positive assortment was found for self-reported and observationally assessed psychological aggression (aim 2b). In an extension of the extant self-report literature, I examined assortative mating across several indicators of psychological aggression. I found that this positive assortment was consistent across self-reported acts and received acts—as well as observational assessments—of psychological aggression. Together, these findings lend support to the developmental systems perspective (Capaldi, Shortt, & Kim, 2005), in that dating couples may be
selecting mates who are similar to themselves on externalizing characteristics, thereby manifesting reciprocal dating aggression. Of note, however, is that these results depended on method of report, in that assortative mating may have been overlooked without cross-informant reports.

The most significant contribution of this study is the novel approach taken to study the association between externalizing behavior problems and psychological aggression, disentangling the effects across cross-informant and multi-method data. In this study, the positive association between externalizing behavior problems and psychological aggression was demonstrated—albeit inconsistently—across several individual indicators, including self-reported acts, self-reported received acts, and observed aggression. Results indicated that the inclusion of these individual indicators is important because clear discrepancies emerged between genders and among methods. Thus, each indicator contributed unique information to understanding the association between externalizing behavior problems and psychological aggression.

In light of the developmental systems model (Capaldi, Shortt, & Kim, 2005), both females and males would be expected to demonstrate similar interactive processes and influences in the occurrence of psychological aggression within the romantic relationship (i.e. couple effects). For acts of psychological aggression (aim 3a), couple effects were found for both females and males—suggesting that one’s own externalizing behaviors predict both one’s own and one’s partner’s acts of psychological aggression. Turning to received acts of psychological aggression (aim 3b), both females and males demonstrated couple effects—suggesting that externalizing behavior problems are associated with
one’s own and one’s partner’s received acts of psychological aggression. Finally, for observed psychological aggression (aim 3c), females demonstrated a couple effect, whereas males demonstrated an actor effect. This suggests that females’ own externalizing behaviors predict both their own and their partner’s observed psychological aggression, whereas males’ own externalizing behaviors predict only their own observed psychological aggression. It is notable that among all these models, effects were not consistent across method. Thus, in partial support of the developmental systems model, both one’s own and one’s partner’s externalizing behaviors are relevant to outcomes of psychological aggression (Capaldi, Shortt, & Kim, 2005). However, clear gender and methodological inconsistencies emerge that are not predicted by theory.

In light of the literature that has suggested gender discrepancies in the association between externalizing behaviors and psychological aggression (Capaldi & Crosby, 1997; Kim & Capaldi, 2004; Maas et al., 2010), gender effects were explicitly examined. I hypothesized that males would consistently demonstrate actor effects, whereas females would consistently demonstrate partner effects. Indeed, the effects of gender led to inconsistencies in the association between externalizing behavior problems and psychological aggression, though the specifics of these associations were somewhat different than expected. In regard to acts of psychological aggression (aim 4a), females and males significantly differed only in the magnitude of cross-informant actor pathways—which suggests that the cross-informant association between one’s own externalizing behaviors and one’s own psychological aggression was stronger for females than males. Therefore, neither Capaldi and Crosby’s (1997) conclusion that actor effects exist only
for males, nor Kim and Capaldi’s (2004) conclusion that partner effects exist only for females, was supported in that both females and males evidenced couple effects when multiple indicators of externalizing behavior problems were used. Next, for received acts of psychological aggression (aim 4b), males and females significantly differed in terms of self-reported and cross-informant actor effects. Specifically, females’ self-reported externalizing behaviors were more strongly related to their own received acts of psychological aggression as compared to males, whereas males’ cross-informant externalizing behaviors were more strongly related to their own received acts of psychological aggression as compared to females. These findings are discrepant from Maas and colleagues (2010) work that suggested actor effects for males only, in that both females and males display couple effects. A probable explanation for these different findings is the use of cross-informant externalizing behavior problems in this study, particularly because cross-informant reports tended to be a robust predictor. Moreover, dyadic data was used in this study, rather than individual self-reports as was utilized by Maas and colleagues (2010), which allowed for interactive effects to be more fully captured. Finally, in regard to observed psychological aggression (aim 4c), females and males significantly differed only in terms of cross-informant partner effects only—suggesting that females’ cross-informant externalizing behaviors were more strongly associated with their male partners’ observed psychological aggression. Thus, Capaldi and Crosby’s (1997) conclusion that males demonstrate an actor effect is supported. However, females displayed actor and partner effects, contributing to a couple oriented model for females, which contrasts with Capaldi and Crosby’s conclusion.
Taken together, females and males are similar in some regards, as is consistent with the developmental systems theory and some extant research (Magdol et al., 1998). However, gender differences are evident as well (Kim & Capaldi, 2004; Maas et al., 2010).

Broadly, females’ own externalizing behaviors contributed to their own and their partners’ psychological aggression outcomes across models, while males’ own externalizing behavior problems contributed to their own psychological aggression outcomes across models and to their partners’ outcomes for self-reported acts and received acts of psychological aggression. Therefore, the method/indicator used to measure the association between externalizing behaviors and psychological aggression significantly impacts the conclusions drawn. This study is the first to illuminate the specifics of these gender differences as a function of method.

Next, method of measurement was explicitly examined, as it was predicted that method would impact the magnitude of the associations between externalizing behavior problems and psychological aggression (aim 5). This hypothesis was supported, though inconsistencies in the effect of method were apparent. For self-reported acts of psychological aggression, method of report significantly influenced the partner effects. In particular, cross-informant reports drove the association among both females’ and males’ externalizing behaviors and their partners’ psychological aggression. For the effects of method on received acts of psychological aggression, method of report significantly influenced the actor effects and partner effects. Specifically, cross-informant indicators drove female actor effects, as well as females’ and males’ partner effects. Finally, for observed psychological aggression, males’ observed psychological aggression was
differentially impacted by self-reported versus cross-informant externalizing behavior problems—this was such that the direction of the direction of the association changed depending on the method of report. However, the unexpected negative association between males’ own self-reported externalizing behaviors and psychological aggression is small and non-meaningful. Follow-up analyses suggested that the negative association is the product of a suppression effect due to females’ partner-reported externalizing behavior problems being considered simultaneously in the model. In summary, cross-informant reports accounted for several of the aforementioned results. In fact, without cross-informant reports, the association between females’ externalizing behavior problems and their own and their partners’ psychological aggression would have been overlooked, as would all partner effects for males. This may be the reason past studies have not detected these interactive effects (Capaldi & Crosby, 1997; Maas et al., 2010; Kim & Capaldi, 2004)

Taken together, important patterns emerge from the data, suggesting that each indicator of externalizing behaviors and psychological aggression contributed unique information to the associations between externalizing behaviors and psychological aggression (aim 6). For females, across all models, one’s own externalizing behavior problems were associated with one’s own and one’s partner’s outcomes of psychological aggression. However, all associations between females’ own externalizing behavior problems and psychological aggression on the part of her partner were limited to cross-informant data. Thus, these associations would have been neglected if only self-report data was used. For males, results were discrepant across models. For acts and received
acts of psychological aggression, males’ own externalizing behaviors were associated with one’s own and one’s partner’s outcomes of psychological aggression. For outcomes of observed psychological aggression, only males’ own externalizing behavior problems were meaningfully associated with their own psychological aggression outcomes. Therefore, the discrepancies reported in the extant literature — wherein some researchers suggest gender similarity (Magdol et al., 1998), while other researchers suggest gender differences in the association between externalizing behaviors problems and dating aggression (e.g. Andrews, Foster, Capaldi & Hops, 2000; Capaldi & Crosby, 1997; Kim & Capaldi, 2004; Maas et al., 2010) — may be an artifact of the method of data analysis used. Disentangling indicators made it possible to further and more fully explore this relationship.

In summary, these findings illuminate the inconsistency of the relationship between externalizing behaviors and psychological aggression across gender of the informant and method of measurement and the importance of using several indicators of relationship processes. Indeed, without cross-informant data several associations would have been overlooked. Moreover, including utilizing several methods of measurement in regard to psychological aggression further allowed us to observe additional associations that may have been neglected if we had relied on any one indicator. Therefore, future studies would benefit by including several indicators of relationship processes and outcomes.
Limitations & Future Directions

There are several limitations to the current study. First, it is important to note that social desirability (i.e. self-preservation) was not measured among participants. This is notable because it is one mechanism that may lead to differential reporting of externalizing behavior problems (Collett, Ohan, & Myers, 2003) and dating aggression (LeJeune & Follette, 1994). For example, in a study conducted by Murphy and Hoover (1999), females who obtained elevated social desirability scores tended to minimize their own psychologically aggressive behaviors. Social desirability also had an influence—albeit a less consistent influence—on females’ reports of their partners’ psychologically aggressive behavior. Therefore, I cannot account for the influence of social desirability in neither self- nor partner- reports of externalizing behaviors, nor can I account for these influences in self-reported acts or received acts of psychological aggression. However, the indicator of observed psychological aggression does circumvent the problem of social desirability. Based on the results of ANOVAs, observed psychological aggression exceeded self-reports of acts and received acts of psychological aggression for females, and males tended to self-report greater externalizing behavior problems than was indicated by their partners’ reports of their behavior problems. Together, this suggests a lesser influence of social desirability in males’ self-reported externalizing behaviors in comparison to females’ self-reports of acts and received acts of psychological aggression.

Second, across the models, results indicated that many of the effects were limited to cross-informant reports of externalizing behavior problems. While these results
suggest that cross-informant reports may provide greater expertise on externalizing behavior problems (as have other studies; e.g. van Dulmen & Goncy, 2010), a competing explanation is that individuals who are involved in aggressive relationships come to see their romantic partners’ as possessing traits consistent with externalizing behavior problems. This hypothesis cannot be ruled out in the current paper, though the consistency of cross-informant reports lends credence to their utility.

Next, another important limitation to this study was that it was based on a cross-informant, convenience sample from a state university. Research has indicated that non-college samples generally report less externalizing behavior problems (Capaldi & Stoolmiller, 1999) and more dating aggression (McLaughlin, Leonard, & Senchak, 1992) than college samples. In light of this research, we attempted to recruit a more diverse sample by allowing participants’ romantic partners to be non-college students. Despite these efforts, 90% of the romantic partners attended school (either part-time or full-time). Moreover, I recognize that this study is not longitudinal, and therefore implies directionality and simplicity among variables that is somewhat arbitrary. For example, it is probable that psychological aggression leads to externalizing behavior problems. Indeed, extant research has suggested that the quality of romantic relationships may lead to externalizing behavior problems. For instance, romantic relationship security, or feeling that one’s partner is available and responsive, has been found to insulate individuals from psychopathology—such as externalizing behaviors (van Dulmen et al., 2008). However, I felt it was important to model my data in a way that reflected the literature suggesting that externalizing behaviors are a risk factor for psychological
aggression (e.g. Feldman & Gowen, 1998). In a similar manner, true assortative mating could not be observed. It may have been that individuals within couples became more alike over the duration of dating. Therefore, the current sample was not representative of dating couples more generally and does not imply causation among the variables; thus a longitudinal follow-up study is warranted.

Next, it is important to note that definitions of romantic relationships during late adolescence are diverse and idiosyncratic (Carver, Joyner, & Udry, 2003). In this study, and similar to Collins’s (2003) conceptualization of romantic relationships, we focused on mutually-defined dating relationships. Over half of our sample had been dating longer than one year. This can be considered limiting in light of the research indicating that more committed, long-lasting, and serious relationships predict higher rates of dating aggression (Capaldi, Shortt, & Crosby, 2003; Hanley & O’Neill, 1997). For this reason, future studies that examine risk factors for psychological aggression may benefit by including individuals involved in more casual dating experiences (e.g. friends-with-benefits, one-night stands). Conversely, given research indicating that cohabiters (7% of the current sample) are more likely to engage in aggression than non-cohabiting dating partners (Magdol et al., 1998), future studies may benefit from investigating more committed samples of varying ages. It is important to note that both length of relationship and cohabitation status were controlled for in the current study. Yet, future studies would benefit from investigating relationship processes in either less or more committed counterparts.
Finally, I recognize that the measurement of psychological aggression was somewhat limited. First, the measure of observational psychological aggression accounted for less variance in the models than did self-reported acts and received acts of aggression. This may indicate that these constructs may be tapping into different levels of expertise between participants and researchers. In addition, we were limited in that frequency ratings—rather than severity ratings—were used. Some researchers have suggested that severity ratings are a necessary consideration in the study of dating aggression (e.g. Follingstad, Bradley, Laughlin, & Burke, 1999; Follingstad, 2007). Therefore, as aforementioned, we have no estimate of the detrimental effects that occurred due to psychological aggression and cannot comment on whether or not more severe abuse occurred (Archer, 1994).

**Conclusion & Implications**

This study provides an important step towards understanding the relationship between correlates for dating aggression and psychological aggression—and, in particular, the utility of cross-informant and multi-method data to clarify this relationship. The major contribution of this study, then, is the importance of collecting cross-informant data when exploring correlates and risk factors associated with dating aggression outcomes. Without cross-informant reports of risk factors, the association between female externalizing behaviors and psychological aggression would not have been evident. Second, the assessment was further enhanced with multiple indicators of psychological aggression—given that the relationship was expressed somewhat differently depending
on method utilized. Therefore, future studies would benefit by using multi-informant and multi-method data.

This study furthermore has implications for clinical settings. Theorists have argued that dating aggression can be viewed in terms of a training ground hypothesis, wherein dating aggression is a mediating stage between experiences in one’s family of origin and one’s family of procreation (Makepeace, 1981). Moreover, experiences of both dating aggression victimization and perpetration carry forth into later relationships (Capaldi, Shortt, & Crosby, 2003; Smith, White, & Holland, 2003; O’Leary et al., 1989; O’Leary & Slep, 2003). Dating relationships, then, should be viewed as the optimal time to both study and intervene on aggressive relationships. Fortunately, as some dating aggression prevention programs (e.g. Safe Dates) have demonstrated some success in lessening violent dating behaviors (Foshee et al., 1998), the possibility of discontinuity through intervention exists. In addition, the results of this study suggest that characteristics (namely externalizing behavior problems) of both the individual—as well as their romantic partner—are important to consider in intervening on dating relationships and the aggression that occurs within them. More specifically, however, it may be that gender differences are evident in importance of one’s partner’s characteristics in predicting abuse. Broadly, this is such that one’s partner’s characteristics may be more important in predicting female outcomes of aggression. These gender differences are not predicted by current theory (i.e. Developmental Systems Models; Capaldi, Shortt, & Kim, 2005); therefore, a revision of the way we conceptualize aggression may be necessary. Finally, it is notable that this study underscores the
importance of assessing risk using cross-informant data. While it has long been noted that multi-method reports of aggression is useful, it is important to highlight that risk markers—such as externalizing behavior problems—also need to be assessed beyond self-reports alone.
REFERENCES


