

# Distinctiveness of Adolescent and Emerging Adult Romantic Relationship Features in Predicting Externalizing Behavior Problems

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**Abstract** Romantic relationship involvement has repeatedly been associated with the incidence of externalizing behavior problems, but little is known about the nature and developmental significance of this relation. The current study extends previous research by investigating whether and through what processes romantic relationships distinctively predict externalizing behavior problems during adolescence compared to emerging adulthood. Data came from the Minnesota Longitudinal Study of Parents and Children. As predicted, higher levels of romantic relationship security at 16 years were associated with lower levels of externalizing behavior problems during both adolescence and emerging adulthood, but this inverse relation was stronger for emerging adults than for adolescents. This relation was not attributable either to earlier quality of family and peer relationships or emerging adulthood competence. Thus, security of romantic relationships may become increasingly predictive of individual differences in externalizing behavior problems as individuals move from adolescence to emerging adulthood.

**Keywords** Adolescence · Emerging adulthood · Externalizing behavior problems · Romantic relationships

## Introduction

Externalizing behavior problems have long been a central interest in developmental research because levels of these problems have frequently been found to be elevated during adolescence. There is, however, considerable heterogeneity in the course of these problems across time; indeed, most children with a history of externalizing behavior problems do not become adult offenders (e.g. Bushway et al. 2003; Moffitt et al. 2002). Given the multifaceted nature of externalizing behavior problems and their development, an important research goal is identifying factors that may moderate the incidence of such problems during adolescence and in later life periods.

Interpersonal contexts have been implicated repeatedly in analyses of the incidence and development of externalizing behavior problems. Key aspects of these interpersonal contexts include parental discipline (e.g., Patterson et al. 1989), peer rejection (e.g., Laird et al. 1999), deviant peer involvement (e.g., Lacourse et al. 2003), and the quality of parent-child relationships (e.g., Moffitt and Caspi 2001). Despite widespread assumptions of a positive association with externalizing behavior problems (Collins 2003), however, romantic relationships have been largely neglected by adolescent researchers until recently. In this article, we first consider the evidence that romantic relationships are developmentally significant experiences. Second, we address the question of whether, and through what processes, adolescent romantic experiences are linked to both concurrent and later incidence of externalizing behavior problems.

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## Romantic Relationships as Developmentally Significant Experiences

Considerable scholarly interest has recently focused on the developmental significance of romantic relationships. In both the adolescent (Collins 2003) and emerging adulthood (Arnett 2000) literatures, scholars have argued for the importance of the developmental context of romantic relationships. Theoretical accounts, as well as a growing body of empirical findings (e.g., Neemann et al. 1995; Zimmer-Gembeck et al. 2001), have highlighted the distinctive functions of romantic relationships in adolescent development. Collins (2003) proposed a five feature-framework for de-composing adolescent romantic relationships for the purpose of scientific study. Two of the features to his framework, romantic relationship involvement and romantic relationship quality, are of interest in the present study. In general, research findings from the past decade have confirmed that involvement in romantic relationships during adolescence, as well as the quality of those relationships, are associated with a variety of both positive and negative social experiences (for reviews, see Collins and Steinberg 2006; Furman and Collins, in press).

It is not clear, however, whether the developmental significance of romantic relationships during adolescence is different from the significance of romantic relationships during later developmental periods. Arnett (2000) proposed that emerging adults (approximately ages 18–25) explore and establish romantic relationships to a different degree than do adolescents. Empirical findings have provided mixed evidence for the distinctiveness hypothesis. Thoughts about romantic relationships become increasingly complex from adolescence into emerging adulthood, but there is also a fair amount of continuity between adolescent and emerging adulthood romantic relationships (for a discussion of this point, see Collins and van Dulmen 2006). The predictors of adaptive romantic relationship functioning during adolescence and emerging adulthood, such as early supportive parenting and high quality friendships, are similar to the predictors of positive functioning in childhood and adolescence. Additional insight into the possible distinctiveness of romantic relationships in emerging adulthood versus adolescence could be provided by evidence that romantic relationships are a unique antecedent or correlate of behavior outcomes during adolescence versus emerging adulthood (Collins and van Dulmen 2006).

## Romantic Relationships and Externalizing Behavior Problems

With regard to the role of romantic relationship processes in the development of externalizing behavior problems,

however, age-specific effects are rare (Laub and Sampson 2003; Meeus et al. 2004; Sampson and Laub 1993). As a result, rather than focus on age effects, this research has focused broadly on differences attributable to romantic relationship involvement and those due to romantic relationship processes, particularly romantic relationship attachment and partner support. Findings from the Cambridge Study of Delinquent Development show that being involved in a romantic relationship during emerging adulthood is associated with a decline in criminal behavior (Farrington 1995; Farrington and West 1995). By contrast, research with adolescent samples suggests that being involved in an adolescent romantic relationship is associated with elevated levels of externalizing behavior problems during adolescence (Farrington 1995; Joyner and Udry 2000; Zimmer-Gembeck et al. 2001). Together, these findings raise the possibility that romantic relationship involvement at one point (adolescence) may serve as a risk factor, whereas romantic relationship involvement at a different time-point (emerging adulthood) may be a protective factor.

With regard to romantic relationship processes in adulthood, empirical findings indicate that both marital stability and attachment in marital relationships are associated with changes in externalizing behavior problems (Sampson and Laub 1993). Research findings indicate that marital support is associated with a decline in externalizing behavior problems during adulthood (Laub and Sampson 2003; Quinton et al. 1993; Sampson and Laub 1993). Social control theory (Hirschi 1969) has been used to account for these findings, on the premise that societal institutions such as marriage should be relatively incompatible with antisocial actions like externalizing behavior problems (Sampson and Laub 1993). In this view, it is not simply whether one is involved in a romantic relationship that predicts differences in externalizing behavior problems, but the strength of the bond in the romantic relationship.

This distinction is consistent with Collins's (2003) proposal that romantic relationship involvement is less likely to be relevant to the developmental sequelae of romantic experiences than the quality of the relationship. It is further buttressed by consistent evidence that engaging in low-quality relationships is associated with both concurrent and later negative behavioral and emotional indicators of individual functioning, compared to high-quality relationships (e.g., Connolly and Konarski 1994; Davies and Windle 2000; Kuttler et al. 1999; Linder and Collins 2005; Seiffge-Krenke and Lang 2002). Despite its useful clues regarding the contribution of romantic relationships in the development of externalizing behavior problems during adulthood, social control theory provides few insights as to why adolescent romantic relationship involvement might be a risk

factor, whereas romantic relationship involvement during emerging adulthood is protective.

In addition to possible age-related patterns of association, different processes of romantic relationships may serve unique functions during adolescence than they do during emerging adulthood. For most emerging adults, romantic relationships are more integrated than was the case in adolescence (Collins and van Dulmen 2006). Consequently, the efficacy of romantic relationship processes as predictors of individual outcomes may depend on the developmental period during which these relationships are experienced.

### Purpose of the Current Study

In the current study, we test several hypotheses regarding the contributions of adolescent and emerging adulthood romantic relationship involvement and romantic relationship security to the incidence of externalizing behavior problems during adolescence and emerging adulthood. We first test the hypothesis that romantic relationships generally contribute more strongly to the prediction of externalizing behavior problems during emerging adulthood than during adolescence. We then test whether this age-related pattern is more apparent when relationship quality, rather than relationship involvement, is the focal indicator of romantic relationship experience. To control for possible confounds, we also test a model including contextual factors previously shown to be related to both externalizing behavior problems and romantic relationship involvement: the impact of quality of early parenting (e.g., Patterson et al. 1989), early adolescent peer competence/peer rejection (e.g., Laird et al. 1999), quality of family relationships during adolescence (e.g., Moffitt and Caspi 2001), and adolescent overall global functioning (e.g., Compas et al. 1991). We hypothesize that the relation between romantic relationship quality and externalizing behavior problems will persist even when these potential confounds are considered.

## Methods

### Participants

Participants came from the Minnesota Longitudinal Study on Parents and Children, an ongoing study of competence and psychopathology during the first three decades of life (Sroufe et al. 2005). The original sample included 267 individuals. Approximately 180 participants were still involved in the study 28 years later. The current study includes 143 participants who were in a romantic

relationship at either age 16, age 19, and/or age 23. The sample included 75 females and 68 males. The sample was predominantly White (69%) with Black (11%) and mixed race (14%) as the other major race categories. Compared to non-participants ( $N = 124$ ), participants in the current study ( $N = 143$ ) were somewhat more likely to be female,  $\chi^2(1) = 6.32, p < .05$  (OR = 1.87). Participants did not differ from non-participants on ethnicity, marital status of the parents at time of birth, maternal educational level at birth, or indicators of early parenting (24-months).

Results of chi-square analyses indicated that involvement in dating at age 16 was not significantly associated with romantic relationship involvement at age 19, or age 23. There was a statistical trend for the association between romantic relationship involvement at age 19 and 23, with participants being involved in a romantic relationship at age 19 somewhat less likely to be involved in a romantic relationship at age 23 as compared to individuals not being in a romantic relationship at age 19 ( $p = .06$ ). Females were more likely to be dating at either age 16, 19, or 23 as compared to males,  $\chi^2(1) = 13.55, p < .001$  (OR = 10.48). Individuals involved in a romantic relationship at either age 16, 19, or 23, did not differ from other participants on ethnicity, age 24-month parenting, grade 6 peer competence, age 16 overall family functioning, or age 19 global competence.

Measures (See also Table 1)

### Age 24-month Overall Parenting

At 24 months, children completed four problem-solving tasks in the presence of their caregiver in the laboratory. Tasks were of increasing difficulty and designed to require the toddler to seek assistance from the caregiver in order to complete the task. Trained raters scored caregivers' behaviors during these interactions on a five-point scale that assessed the degree of the parent's overall support and sensitivity to the child's emotional and developmental needs. High scores (5) were assigned when parents were consistently supportive, enthusiastic, and patient without being overly controlling. Low scores (1) were assigned when parents became emotionally detached or withdrawn, or when parents became angry, frustrated, or overly controlling. Interrater reliability (intraclass correlation) for the overall parenting scale was .82.

### Grade 6 Peer Competence

In grade 6, peer competence was conceptualized as the extent to which children were well-liked and respected by

**Table 1** Summary constructs and measures

Construct	Measure	Scale/criteria	Reporter
Age 24-months	Laboratory observation of parent and child	Overall parenting scale (5 points)	Trained raters
Parenting quality	Peer competence rank relative to classmates	Rank divided by number of classmates	Elementary school teacher
Grade 6	Self-report family inventory	Family health/competence scale (5 points)	Adolescent
Peer competence	Age 16 relationships interview	Four dates; dating for 2 weeks or longer	Trained raters
Age 16	Age 16 relationships interview	Dating security scale (7 points)	Trained raters
Quality of family relationships	Youth self-report	Externalizing subscale (t-scores)	Adolescent
Dating involvement	Age 19 relationships interview	Dating relationship of 2 or more months	Trained raters
Dating security	Age 19 relationships interview	Global competence scale (7 points)	Trained raters
Externalizing behavior	Age 23 relationships interview	Currently dating, engaged, committed, or married	Young adult
Age 19	Age 23 relationships interview	Relationship security scale (7 points)	Trained raters
Romantic involvement	Young adult self-report	Externalizing subscale (t-scores)	Young adult
Global competence			
Age 23			
Romantic involvement			
Romantic security			
Externalizing behavior			

peers, demonstrated understanding of others' perspectives, and engaged other children in activities. Each participant's elementary school classroom teacher rank-ordered students, relative to other classmates, according to peer competence. Peer competence scores thus represent each participant's competence rank in his or her sixth grade class, divided by the total number of students in each respective class.

*Age 16 Quality of Family Relationships*

Quality of family relationships at age 16 was measured by the Family Health/Competence subscale of the Self-Report Family Inventory (SFI; Beavers, Hampson, and Hulgus, 1985). The subscale consisted of 19 items, rated by participants on a five-point scale that assessed dimensions such as family happiness, optimism, love, problem-solving, and listening skills. Cronbach's alpha for the Family Health/Competence subscale of the SFI was .88 in the current sample.

*Age 16 Romantic Relationship Involvement*

Age 16 dating involvement was measured through information from the age 16 relationship interview. The relationship interview, conducted in person by trained research assistants and staff, assessed aspects of adolescents' peer relations, closest friendships, and dating relationships. Adolescents were considered to be involved in a romantic relationship if they had gone out on at least four dates with a single individual or had been dating someone for at least two weeks, with frequent contact in person or on the telephone. Based on this criterion, seventy adolescents (42% of all age 16 participants) were in a dating relationship at age 16.

*Age 16 Romantic Relationship Security*

Age 16 romantic relationship security was assessed through ratings derived from individual interviews. During these interviews of all participants at age 16, participants were asked about their current or most recent dating relationship within the past year. Trained coders rated security on a seven-point Likert scale (interrater agreement, intraclass correlation  $r = .68, p < .01$ ) ( $M = 4.3, SD = 1.48$ ) with a high score (7) representing "freedom to be yourself, willingness to be vulnerable in front of partner, courage to determine exploitive relationships, treat partner with respect, and lack of excessive fear of abandonment."

### *Age 16 Externalizing Behavior Problems. Youth Self Report (Age 16)*

Externalizing behavior problems were measured at age 16 through the Youth Self-Report (YSR, Achenbach 1991). The YSR (119 items) is administered to the adolescent and is scored on eight subscales (withdrawn, somatic complaints, anxious/depressed, social problems, thought problems, attention problems, delinquent behavior, and aggressive behavior) that make up internalizing and externalizing scales. For purposes of this paper we used the T-scores<sup>1</sup> on the externalizing scale. Example items on the externalizing scale include ‘I disobey my parents’, ‘I steal at home’, and ‘I physically attack people’. This scale consists of the sub-scales of delinquent behavior and aggressive behavior. One-week test-retest reliability on the YSR ranges from .67 to .91 (Pearson correlation) for the internalizing and externalizing scales (Achenbach 1991). The YSR successfully distinguishes between clinically referred versus non-referred adolescents (Achenbach 1991).

### *Age 19 Global Competence*

Global competence at age 19 (interrater agreement intraclass correlation  $r = .93, p < .01$ ) was scored based on a comprehensive interview about three domains: (1) family and peer relationships, (2) work and/or school, and (3) self-awareness, identity, and goal-directedness. Competence was rated by trained coders on a five-point scale. High scores (5) were assigned to participants who were functioning well in all areas. Mid-range scores were assigned to participants who were functioning adequately with a major problem in one area, or with minor problems in multiple areas. Low-range scores (1) were assigned to participants who were functioning poorly in most or all areas.

### *Age 19 Romantic Relationship Involvement*

Age 19 romantic relationship involvement was based on questions from the age 19 romantic relationship interview. The age 19 interview was conducted in person by trained research assistants and staff and paralleled the age 16 relationship interview questions about friendships and dating relationships. Adolescents were considered to be in a romantic relationship at age 19 if they had been in a current dating relationship for at least two months. Eighty-

nine participants (57% of all age 19 participants) were considered to be in romantic relationship based on this criterion.

### *Age 23 Romantic Relationship Involvement*

Age 23 romantic relationship involvement was based on questions from the age 23 romantic relationships interview (the parallel assessment to the Age 16 and Age 19 Relationships Interviews). Participants who said that they were currently dating, engaged, or married/committed were considered to be in a romantic relationship. Based on this criterion, 110 participants (69% of all age 23 participants) were in a romantic relationship at age 23.

### *Age 23 Romantic Relationship Security*

At age 23, romantic relationship quality was assessed in terms of romantic relationship security (interrater agreement, intraclass correlation  $r = .89, p < .01$ ). As at age 16, raters used a seven-point Likert scale on which high scores (7) represented the “extent to which the participant believes the partner is available and responsive to his/her needs, and feels able to be wholly him- or herself in the relationship.”

### *Age 23 Externalizing Behavior Problems*

Age 23 externalizing behavior problems were measured through the Young Adult Self Report (YASR, Achenbach 1997). The YASR is similar in structure to the YSR. Example items on the externalizing subscale of the YASR include ‘I break rules at work or elsewhere’, ‘I lie or cheat’, ‘I damage or destroy my things’. One-week test-retest reliability on the YASR is  $r = .86$ . Scores on the YASR successfully differentiate between clinically referred versus non-referred young adults (Achenbach 1997).

### *Analysis Plan*

Our first research question focused on testing whether romantic relationships contribute more strongly to the prediction of externalizing behavior problems during emerging adulthood than during adolescence. In order to test this hypothesis with regard to romantic relationship involvement, we conducted independent sample t-tests. In order to investigate this association for romantic relationship security, we investigated bivariate Pearson correlation coefficients. In order to formally test whether the

<sup>1</sup> In the current sample, T-scores and raw scores on the YSR and YASR were correlated at levels exceeding  $r = .95, p < .0001$ .

correlation coefficients were significantly different during adolescence versus emerging adulthood, we conducted r-to-z transformations (Knoke and Bohrnstedt 1994). To investigate whether the age-related pattern was more pronounced when the dependent variable was romantic relationship security rather than romantic relationship involvement, we conducted Analysis of Covariance (ANCOVA) models with romantic relationship security (age 23) as a covariate and romantic relationship involvement (age 16/age 19) as a between-subject factor. Finally, to examine possible confounds, we conducted linear regression models with externalizing behavior problems as a dependent variable, possible confounds as control variables, and romantic relationship security/involvement as a predictor variable.

## Results

### Do Romantic Relationships Contribute More Strongly to the Prediction of Externalizing Behavior Problems During Emerging Adulthood than During Adolescence?

We first investigated whether romantic relationships contribute more strongly to externalizing behavior problems during emerging adulthood as compared to adolescence. The first set of analyses investigated this question with regard to romantic relationship involvement. Independent sample t-tests indicated that there was no statistically significant relation between romantic relationship involvement and externalizing behavior problems at age 16. However, at age 19, romantic relationship involvement predicted age 23 externalizing behavior problems; individuals in a romantic relationship at age 19 ( $M = 48.43$ ,  $SD = 9.88$ ) had lower levels of externalizing behavior problems at age 23 compared to individuals not in a romantic relationship at age 19 ( $M = 52.38$ ,  $SD = 10.81$ ),  $t(151) = 2.36$ ,  $p < .05$  ( $ES = .38$ ). Neither age 23 romantic relationship involvement nor age 16 dating involvement were significantly associated with age 23 externalizing behavior problems.

Next, we investigated whether the efficacy of relationship quality (relationship security) as a predictor of externalizing behavior problems, would differ between adolescence and emerging adulthood. Bivariate correlations indicated that the association between age 16 romantic relationship security and age 16 externalizing behavior problems approached statistical significance ( $r = -.22$ ,  $p = .06$ ). However, as expected, age 23 romantic relationship security was significantly and negatively associated with age 23 externalizing behavior problems ( $r = -.40$ ,  $p < .05$ ), such that lower levels of

externalizing behavior problems were associated with higher levels of romantic relationship security. These correlations reflect small to medium (adolescence), and medium to large (emerging adulthood), effect sizes (Cohen 1992).

To test whether the relation between romantic relationship security and externalizing behavior problems was stronger during adolescence versus emerging adulthood, we conducted r-to-z transformations. Results indicated that age 23 romantic relationship security was more strongly associated with externalizing behavior problems at age 23 as compared to the association between age 16 dating security and age 16 externalizing behavior problems ( $z = 2.11$ ,  $p < .05$ ,  $ES = .26$ ). Thus, individual differences in romantic relationship security are more strongly associated with externalizing behavior problems during emerging adulthood than during adolescence.

### Is this Age-Related Pattern More Apparent for Romantic Relationship Security as Compared to Romantic Relationship Involvement?

In order to investigate whether the age-related pattern was more apparent for romantic relationship security as compared to romantic relationship involvement, we tested an ANCOVA model. Because our earlier findings indicated that age 16 romantic relationship involvement was not significantly associated with externalizing behavior problems, either during adolescence or emerging adulthood, we did not consider age 16 romantic relationship involvement as a between-subjects factor in the ANCOVA model. Thus, we tested an ANCOVA model investigating whether the association between age 19 romantic relationship involvement and age 23 externalizing behavior problems could be accounted for by age 23 romantic relationship security. Romantic relationship involvement was entered as a between-subjects variable and romantic relationship security was entered as a covariate. This model explained 19% of the variance in age 23 externalizing behavior problems. After considering the effect of age 23 romantic relationship security on age 23 externalizing behavior problems,  $F(1, 84) = 16.08$ ,  $p < .001$ , the relation between age 19 romantic relationship involvement and age 23 externalizing behavior problems was not statistically significant. This finding suggests that the effect of romantic relationship involvement in the transition from late adolescence to emerging adulthood (age 19) on emerging adulthood externalizing behavior problems (age 23) can be accounted for by individual differences in romantic relationship security during emerging adulthood.

### Tests of Possible Confounding Variables

Next, to rule out possible confounds, we tested a linear regression model to investigate whether global adaptation or earlier parenting/peer/family relationships could account for the effect of romantic relationship security on externalizing behavior problems during emerging adulthood. Missing data on predictor variables (4.2%) were handled using imputation procedures under the Expectation Maximization (EM) algorithm (Allison 2002) in PRELIS (Jöreskog and Sörbom 1996). At the first step we entered four theoretically relevant control variables (24 month parenting, grade 6 peer competence, age 16 quality of family relationships, and age 19 global competence). We also tested whether these variables were related empirically to externalizing behavior problems.

Preliminary analyses were conducted to investigate the bivariate association between control variables and age 23 externalizing behavior problems (see Table 2). The results of the preliminary analyses indicated that higher levels of 24 month parenting ( $r = -.28, p < .01$ ), higher levels of self-reported family functioning at age 16 ( $r = -.28, p < .01$ ), and higher levels of externalizing behavior problems at age 16 ( $r = -.33, p < .01$ ) were associated with lower levels of externalizing behavior problems at age 23. Finally, higher levels of grade 6 peer competence ( $r = -.19, p < .05$ ) and global adjustment at age 19 were associated with lower levels of externalizing behavior problems at age 23 ( $r = -.35, p < .01$ ). Regression analyses indicated that these control variables explained 26% ( $R^2 = .26$ ) of the individual differences in externalizing behavior problems at age 23, reflecting a medium effect size. When considering these control variables simultaneously, age 16 externalizing behavior problems ( $\beta = .24, p < .05$ ), age 16 self-reported family functioning ( $\beta = -.21, p < .05$ ), and age 19 global adjustment ( $\beta = -.21, p < .05$ ) were significantly associated with age 23 externalizing behavior problems.

Results of the regression analyses (see Table 3) further showed that adding age 23 romantic relationship security significantly improved the model,  $F_{\text{change}}(1, 86) = 7.66, p < .01$ , and explained an additional 6% of the variance in age 23 externalizing behavior problems. The change in  $R^2$  reflects a small to medium effect size (Cohen 1992). While considering the control variables, higher levels of age 23 romantic relationship security were associated with lower levels of age 23 externalizing behavior problems ( $\beta = -.27, p < .01$ ). This finding indicates that the role of emerging adulthood romantic relationship security in predicting emerging adulthood externalizing behavior problems cannot be accounted for by potential protective factors experienced earlier in life, or by adolescent externalizing behavior problems.

### Discussion

The findings from the current study generally confirmed the focal hypothesis that romantic relationship security was associated with externalizing behavior problems in both adolescence and emerging adulthood, with a statistically stronger relation during emerging adulthood than during adolescence. Moreover, as expected, significant associations between romantic relationship involvement and externalizing behavior problems (from age 19 to age 23) were accounted for by romantic relationship security, indicating the primary importance of the quality of the relationship. These statistically significant, but indirect, relations could not be accounted for by early childhood parenting, middle childhood peer relationships, adolescent family functioning, or overall competence during the transition from adolescence into emerging adulthood.

A provocative implication of these findings is that romantic relationship security may act as a protective factor for externalizing behavior problems in emerging adulthood. Consistent with other findings (e.g., Sampson

**Table 2** Descriptive statistics and Pearson correlations predictions of age 23 externalizing behavior problems ( $N = 93$ )

	1	2	3	4	5	6	7
1. 24 Month parenting	1						
2. Grade 6 peer competence	.37***	1					
3. Age 16 family functioning	-.18*	.01	1				
4. Age 16 externalizing behavior problems	-.09	-.17 <sup>+</sup>	-.05	1			
5. Age 19 global adjustment	.27*	.25**	.10	-.26**	1		
6. Age 23 romantic relationship security	.22*	.14 <sup>+</sup>	.26**	-.13	.29**	1	
7. Age 23 externalizing behavior problems	-.28**	-.19*	-.28**	.33**	-.35***	-.42***	1
<i>M</i>	3.19	55.40	2.43	54.88	3.61	3.51	49.40
<i>SD</i>	1.02	29.78	.67	8.84	1.00	1.27	10.65

\*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \*  $p < .05$ ; <sup>+</sup>  $p < .10$

**Table 3** Linear regression analyses predicting age 23 externalizing behavior problems (*N* = 93)

	Model 1		Model 2	
	B (SE B)	$\beta$	B (SE B)	$\beta$
24 Month parenting	-1.58 (1.01)	-.15	-1.28 (1.04)	-.12
Grade 6 peer competence	-.02 (.04)	-.04	-.01 (.04)	-.03
Age 16 family functioning	-3.42 (1.50)	-.21*	-2.48 (1.49)	-.16 <sup>+</sup>
Age 16 externalizing behavior problems	.29 (.11)	.24*	.27 (.11)	.23*
Age 19 overall adjustment	-2.27 (1.06)	-.21*	-1.65 (1.05)	-.16
Age 23 romantic relationship security			-2.24 (.81)	-.27**
	$R^2 = .26$		$R^2 = .32$	
	$F_{\text{change}} (1.86) = 7.66^{**}$			

\*\*  $p < .01$ ; \*  $p < .05$ ; +  $p < .103$

and Laub 1993), becoming involved in a romantic relationship during emerging adulthood appears to be associated with lower levels of externalizing behavior problems. In contrast, it should be noted that previous findings from the same sample (Zimmer-Gembeck et al. 2001) have shown that over-involvement in dating, as indicated by the number of dating partners in the past year, was associated with externalizing behavior problems at age 16. Thus, although some precedent findings from the adult literature indicate that romantic relationship involvement may be a protective factor for externalizing behavior problems, findings from the adolescent literature suggest that adolescent dating involvement, at least during middle adolescence (age 16), is not associated with externalizing behavior problems.

Contrary to other findings (e.g. Meeus et al. 2004; Neemann et al. 1995), however, the present findings yielded no evidence that earlier initiation of dating relationships led to worse outcomes. One explanation for the different findings in the current study, compared to earlier ones, is that the initial assessment of romantic relationships pertained to age 16 dating relationships. Neemann and colleagues (1995) found that romantic relationship involvement during late childhood was associated with rule breaking behavior during middle adolescence, but this association occurred for romantic relationship involvement during middle childhood and rule breaking behavior during late adolescence. Meeus and colleagues (2004) found a significant association between romantic relationship involvement and externalizing behavior problems during middle adolescence, but their finding was primarily apparent for individuals who had been consistently involved in such relationships across a 6-year time-span.

One possible implication of the present findings is that assessing whether one is involved in a romantic relationship during middle adolescence may not be the optimal operationalization of romantic relationship involvement if one is interested in identifying protective and risk factors for adolescent behavior problems. Involvement in dating at

age 16 is relatively normative, with more than 50% of all adolescents having experienced a romantic relationship in the past 18 months (Carver et al. 2003). Because romantic relationship involvement is relatively normative by age 16, involvement per se may not be a central risk or protective factor for the development of externalizing behavior problems at age 16. It may be more crucial to identify risk and protective factors derived from adolescent romantic relationship involvement. For example, recent empirical findings indicate that patterns of dating relationships—reflecting information on the number of dating partners, onset of dating, and cheating—were strongly associated with externalizing behavior problems during middle adolescence (Furman et al. 2007). These latter findings suggest that finding scientifically innovative ways to integrate information on dating behavior may further aid our understanding on the role of dating relationships in the development of individual behavior problems.

The present findings underscore the importance of considering a developmental perspective to the link between romantic relationships and externalizing behavior problems during adolescence and emerging adulthood. Although our results replicate frequently reported correlations between involvement in romantic relationships and incidence of behavior problems, this association is qualified by the difference in associations during one developmental period (emerging adulthood) versus another (adolescence). This pattern raises the possibility that emerging adulthood, as a developmental period, is qualitatively and quantitatively distinct from adolescence with regard to the role of romantic relationships.

Limitations of the Current Study

The current study used a broadband conceptualization of externalizing behavior problems outside of the romantic relationship. A natural extension of the current study would be investigating whether the predicted associations extend to externalizing behavior problems within the romantic

relationship and across different sub-domains of externalizing behavior problems. For example, some preliminary findings using data from the National Longitudinal Study of Adolescent Health indicate that the association between romantic relationship quality and externalizing behavior problems is stronger for nonaggressive as compared to aggressive externalizing behavior problems, both during adolescence and emerging adulthood (van Dulmen and Goncy 2006). These latter findings suggest that romantic relationship quality may be associated with some, but not all, facets of externalizing behavior problems. An important next step would be to explore whether these findings extend to other aspects of romantic relationship functioning.

### Future Directions

Although assessing romantic relationship involvement at three time-points (ages 16, 19, and 23) yielded evidence for unique predictive validity of romantic relationships across two developmental periods—adolescence and emerging adulthood, it remains unclear whether there is a particular age or age-period when the role of romantic relationships shifts or becomes more salient. Future studies should include more fine-grained and shorter time-interval designs to capture the course of adolescent and emerging adulthood romantic relationships (Collins and van Dulmen 2006). This is particularly important because only about half of all romantic relationships during middle adolescence last at least one year (Carver et al. 2003). Using more fine-grained and frequent time intervals for assessing romantic relationships should allow for a more complete picture of the changes not only in the course of individual romantic relationships, but also in the function and role of romantic relationships as adolescents move into emerging adulthood.

The present findings further provided evidence that one romantic relationship process, romantic relationship security, is more strongly related to behavioral outcomes during emerging adulthood than during adolescence. To further investigate the developmental distinctiveness of adolescent and emerging adulthood romantic relationships, future studies should examine whether the results for externalizing behavior problems are indicative of the significance of romantic relationships for other behavioral outcomes, such as individual well-being and depression. The current findings also raise the possibility that romantic relationship processes play a distinct role in understanding individual differences in behavior problems during adolescence as compared to emerging adulthood. In understanding the role of adolescent romantic relationships, therefore, it is essential to adopt a developmental perspective (see also Collins 2003). Whereas other studies have focused on

whether the content and nature of adolescent romantic relationships are distinct from adult romantic relationships (Shulman and Scharf 2000), this study is one of the first to address the question of whether adolescent romantic relationships play a distinct role from adult romantic relationships in understanding individual behavioral outcomes. Expanding the scope of research on the role of romantic experiences is a promising avenue to a better understanding of close-relationship contexts in development in and beyond the second decade of life.

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