

## Actor and Partner Effects of Adolescents' Romantic Working Models and Styles on Interactions with Romantic Partners

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The present study examined how adolescents' and their romantic partners' romantic working models and relational styles were related to their interactions with each other. Sixty-five couples ( $M$  age = 18.1 years) were observed interacting. Romantic working models were assessed in interviews about their romantic experiences; romantic styles were assessed by self-report. Data were analyzed using the Actor Partner Interdependence Model. Working models of romantic relationships, especially girls' models, were predictive of their behavior, the partners' behavior, and the dyads' behavior. Fewer links were found between relational styles and observed behavior. The present study extends past work by showing that representations of romantic relationships influence or are influenced by romantic interactions, even as these representations and relationships are just developing.

Adolescents turn to romantic partners for support as much as to anyone else except same-sex friends (Furman & Buhrmester, 1992). At the same time, conflicts with a romantic partner are also commonplace (Furman & Buhrmester, 1992). Thus, these relationships are not only central, but vary substantially in nature. As yet, however, we know little about the factors that may be associated with such differences in patterns of interaction.

In their behavioral systems theory Furman and Wehner (1994) proposed that individuals develop *views of romantic relationships*. That is, they develop representations of romantic relationships, the self in romantic relationships, and the partner in romantic relationships. These representations are conceptualized as expectations regarding *romantic intimacy and closeness* (Furman & Simon, 1999). Views are expected to influence a person's behavior toward

a romantic partner and serve as a basis for predicting and interpreting the partner's behavior. This concept of views was based on attachment theorists' concept of working models or attachment styles (Bowlby, 1973; Main, Kaplan, & Cassidy, 1985). In fact, relational views are categorized into a taxonomy similar to attachment theory's system of secure, dismissing, and preoccupied representations. Views are, however, intended to apply more generally. Attachment theorists have been principally concerned with representations of attachment relationships, but the concept of views is intended to apply to other close relationships as well, such as adolescent peer relationships. The concept of views appears applicable to friendships and adolescent romantic relationships as well as attachment relationships, because representations of these types of relationships are concerned with issues of intimacy and closeness.

One difference between behavioral systems theory and attachment theory is in how representations are thought to be organized. Specifically, we hypothesize that individuals have representations of *intimacy and closeness within types* of relationships, such as romantic relationships, rather than representations of the *attachment system across types* of relationships. Thus, we refer to romantic views of intimacy and closeness, rather than general attachment representations. Consistent with this idea, working models of relationships with parents and romantic partners have been found to be only modestly related to one another (Dickstein, Seifer, St

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Andre, & Schiller, 2001; Furman, Simon, Shaffer, & Bouchey, 2002; Owens et al., 1995).

Two levels of views are thought to exist: romantic styles and romantic working models. Romantic styles are self-perceptions of how one approaches romantic relationships and what one expects from these relationships. Romantic working models (states of mind) are internalized representations of romantic relationships (Furman & Wehner, 1994). Styles are measured by self-report measures similar to attachment style questionnaires, but the measures assess intimacy and closeness with respect to caregiving and affiliation as well as the attachment system. Working models can be assessed through interviews such as the Romantic Interview (RI; Furman, 2001). Coherence of discourse is assessed just as in the Adult Attachment Interview (AAI), but the RI asks about caregiving and affiliation as well as attachment.

#### *Views and Patterns of Interaction*

Studies have shown that attachment working models are related to patterns of interactions in adults' romantic relationships (e.g., Cohn, Silver, Cowan, & Cowan, 1992; Creasey, 2002; Crowell et al., 2002; Paley, Cox, Burchinal, & Payne, 1999). In these studies each member of the couple was administered the AAI and then the two were observed interacting. In general, secure individuals were found to display more positive behaviors and more effective communication; they also engaged in fewer negative behaviors. Although the AAI is the most commonly used instrument for assessing working models, its questions focus on childhood relationships with parents, and thus assess representations of relationships with parents. Working models of relationships with parents are related to working models of romantic relationships (Dickstein et al., 2001; Owens et al., 1995), but only moderately so, especially in adolescence when romantic relationships are first being established (Furman et al., 2002).

Recently, a few investigators have examined the links between *romantic working models* and patterns of interaction (Alexandrov, Cowan, & Cowan, 2005; Roisman, Collins, Sroufe, & Egeland, 2005; Treboux, Crowell, & Waters, 2004). In general, secure romantic models are associated with higher quality relationships, as evidenced by more secure base behavior, positive affect, and successful conflict resolution, and less negative affect and fewer negative interactions.

Similarly, Simpson, Rholes, and their colleagues have examined the links between interaction and

*romantic styles* using self-report questionnaires. Women were told that they were going to participate in an anxiety-arousing procedure and asked to wait with their partner. More secure women sought out more support with increasing levels of anxiety, and more secure men offered more support as their partners became more anxious (Simpson, Rholes, & Nelligan, 1992). The more avoidant men and women displayed more anger (Rholes, Simpson, & Oriña, 1999) and behaved more negatively if their partners were more avoidant (Campbell, Simpson, Kashy, & Rholes, 2001). In another study, women's provision of support was predicted by both AAIs and romantic style questionnaires (Simpson, Rholes, Oriña, & Grich, 2002).

These studies provide evidence that *views* are linked to patterns of interaction. In many instances, the investigators have focused on the differences between those with secure and insecure views, and we know less about how specific forms of insecurity, such as dismissing and preoccupied views, may be related. Additionally, the links between interactions and measures of both romantic working models and romantic styles have not been assessed within a single study. Thus, one of the major aims of the present study was to examine the links between patterns of interaction and the various romantic working models and styles.

Additionally, existing studies have focused on the links between views and interactions of adult couples. As of yet, we do not know if such representations influence patterns of romantic interactions in adolescence, when views regarding romantic relationships are just emerging. It is possible that such nascent views may not influence interactions. Similarly, patterns of interactions may not be well established as most adolescents are not very experienced in romantic relationships and may be experimenting with different types of partners or relationships. We, however, expected that views and patterns of interaction would be sufficiently established as to be linked to each other.

#### *Actor-Partner Interdependence Model (APIM)*

In most studies of heterosexual couples, investigators have examined the effects of views on one's own behavior, or what has been termed an actor effect. Typically, the impact of the male's views on his behavior is examined in one set of analyses, and the impact of the female's views on her behavior is examined in another set. Such an approach does not consider the possibility that one person's views may affect the other's behavior (i.e., a partner effect).

In the instances in which partner effects have been examined (e.g., Paley et al., 1999; Simpson et al., 2002), one set of analyses examined the effects of the male's views on the female's behavior, and another set examined the effect of the female's views on the male's behavior. This approach does not take into account the potential dependency in the two individuals' views or behavior. The seeming effect of the partner's view on behavior could actually stem from covariation in the partner's and person's views and the effect of the person's view on his or her own behavior. It is necessary to examine simultaneously the person's and the partner's views and behaviors to be able to identify each of their effects. Only Campbell et al. (2001) simultaneously assessed the independent contributions of one's own views and the partner's views on behavior.

Recently Kenny and colleagues developed the APIM, which allows the simultaneous and independent estimation of the effect of each person's score on one variable on both his or her own behavior (an actor effect) and on the other's behavior (a partner effect) (Kashy & Kenny, 2000; Kenny & Cook, 1999). Figure 1 depicts the general APIM that guided the present study. The actor effects are depicted in paths a and b from one's own views to one's own behavior. The partner effects are depicted in paths c and d from one's views to the other's behavior. Statistically, the partner effects in the APIM could reflect either direct effects or effects mediated by the partner's behavior. That is, the partner's views could either directly affect the actor's behavior or they could affect them by affecting the partner's own behavior, which in turn affects the actor's behavior. The latter is more plausible, as a partner's cognitive views are not likely to be apparent to the actor except

by the way the partner behaves toward the actor. The mediated effects, as well as the direct effects, are reflected in paths c and d in the standard APIM.

The APIM also includes a term representing the interaction of the actor and partner scores; paths e and f reflect the effect of the configuration of the two individuals' scores on the behavior of each. Any interdependence in views and behavior is depicted in paths g and h, respectively. Paths i and j reflect the covariations between the interaction term and the two terms of which it is composed. Actor, partner, and actor by partner interaction effects are estimated simultaneously, controlling for one another. In effect, this approach recognizes that the dyad is an interpersonal system and that both people need to be considered simultaneously.

### Current Study

We examined actor and partner effects of views on the communication skills, affective expression, and conflictual behavior of each person. We also examined the effects of each person's views on the positivity of the dyad. These four dimensions of romantic couples' interactions facilitate or challenge intimacy between partners and were thus expected to be associated with adolescents' romantic views.

Specifically, more secure views were hypothesized to be associated with greater communication skills, as security should facilitate intimacy through the direct discussion of concerns, understanding of the other's concerns, and negotiation of any differences (Kobak & Duemmler, 1994). More secure views were also hypothesized to be associated with less conflict, as the direct discussions, understanding of the other, and negotiations should be associated with

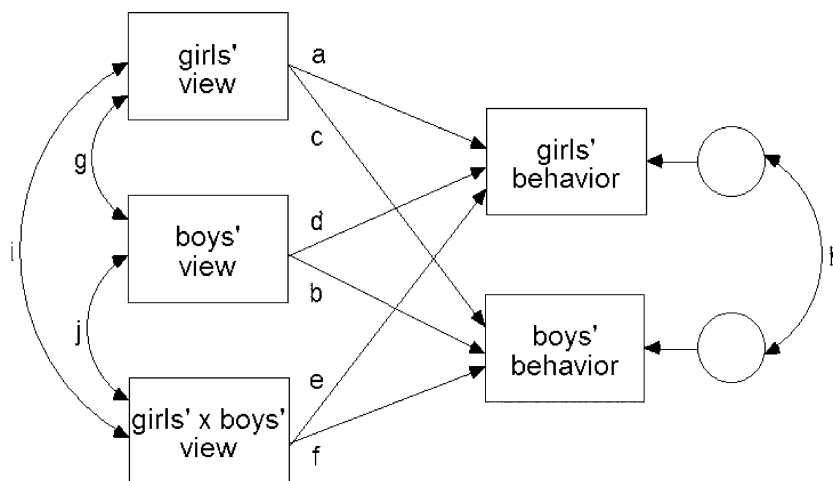


Figure 1. Actor-Partner Interdependence Model of Views and Individuals' Behavior.

less intense and sustained conflicts and easier conflict resolution. More secure views should be associated not only with more successful communications and lower conflict but also with more frequent support seeking and providing. For all these reasons, more secure views were expected to be associated with a more positive affective tenor and greater dyadic positivity.

In contrast, those with more dismissing views may minimize the importance of intimacy. They may anticipate rejection or a lack of support and shift attention from conversational topics related to intimacy (Kobak & Duemmler, 1994). Thus, we expected that the more dismissing the views, the lower the level of communication skills. More dismissing views were also expected to be associated with less positive affective expression, as more dismissing views would be expected to be associated with less positive emotion and less validation. Similarly, we hypothesized that more dismissing views would be associated with less dyadic positivity.

Those with more preoccupied views are more likely to experience uncertainty about romantic intimacy. They may exaggerate or display heightened displays of distress as a means of more reliably gaining the partner's attention and support (Cassidy & Berlin, 1994; Kobak & Duemmler, 1994). Accordingly, we hypothesized that greater ratings of preoccupation would be associated with more conflictual behavior. Because of their uncertainty, those with more preoccupied views were also hypothesized to have a less positive tenor of affect because of expressing more negative affect. Similarly, we also hypothesized that more preoccupied views would be associated with less dyadic positivity. Table 1 presents a summary of the predictions.

We examined the links between the patterns of interaction and both working models and styles. The predictions for working models and styles parallel each other, but the nature and strength of the two sets of relations are important questions. Consider-

able debate exists about the relative merits of examining models and styles (see Fraley, 2002). Aside from the evidence that the two are only moderately related (Crowell, Fraley, & Shaver, 1999), little direct research exists on the similarities and differences between their relations with other variables. Most studies have used only one type of measure, and the focus of research and populations of interest have been relatively disparate. The few studies that have included both working model and style measures have typically used a measure of working models of parents (the AAI) and a romantic style measure (Simpson et al., 2002; Waters, Crowell, Elliott, Corcoran, & Treboux, 2002). Thus, the nature of the representation (working model vs. style) is confounded by the nature of the relationship (parent vs. romantic). To the best of our knowledge, only Furman et al. (2002) have examined working models and styles of the same relationship domain. Research on both models and styles has rich traditions, but it is theoretically important to examine simultaneously the links the two have with patterns of interaction so that we understand their similarities and differences. A finding that styles are related in ways similar to models would also have important pragmatic implications as such measures are less expensive to administer and score.

Adult romantic styles have also been found to be predictive of the partner's as well as one's own behavior (Feeney, 2003; Simpson et al., 2002). Accordingly, we expected to find partner effects that would stem from the indirect effect of views on the partner's behavior, which in turn affect the actor's behavior. Partner effects were expected to parallel the hypothesized actor effects, although overall we expected more or stronger actor effects than partner effects, as the links of one's views with one's own behavior are more direct than those with the other's behavior.

We also examined whether the configuration of views of both individuals was associated with patterns of interaction. For example, Cohn et al.

Table 1  
Summary of Hypotheses

Views	Observational Factors			
	Communication Skills	Conflict	Affective Expression	Dyadic Positivity
Secure	+	–	+	+
Dismissing	–		–	–
Preoccupied		+	–	–

Note. + Positive relation predicted between the column and row variable. – Negative relation. Blank cells indicate no prediction.

(1992) found that dyads in which both were insecure on the AAI differed from dyads in which one or both were secure, but Creasey (2002) found that differences could be accounted for from the individual AAI classifications, with little contribution from the combination itself. Given the variability in findings, we tendered no predictions regarding whether the configuration would be related to the pattern of interactions.

In a related vein, we also examined the degree of association between the boys' and girls' views. A modest to moderate level of correspondence occurs in romantic working models of married couples (Alexandrov et al., 2005; Owens et al., 1995). Similarly, those with secure romantic attachment styles are more likely to date and marry other secure individuals (Brennan & Shaver, 1995; Collins & Read, 1990; Feeney, 1994; Kirkpatrick & Davis, 1994). Concordance of specific types of insecurity is less clear, as pairs comprised of two avoidants or two anxious-ambivalents may be uncommon (Brennan & Shaver, 1995; Kirkpatrick & Davis, 1994). Additionally, some work suggests that the correspondence is lower in dating than in married couples (Carnelley, Pietromonaco, & Jaffe, 1996). Accordingly, we expected to find some correspondence in the two individuals' views, but only a moderate level.

## Method

### *Participants*

The participants were part of a large project on adolescent romantic relationships. The participants in the overall project were 197 high school seniors who had been recruited through urban and suburban public schools in a large metropolitan area. For this particular study, we selected the subset of participants who had been dating someone for 6 months or longer, but were not married or living together (*Mdn* length = 18 months, range = 6–47 months). We contacted their partners, and asked them to participate in this part of the project.

The resulting sample comprised 65 heterosexual couples. The high school seniors ranged in age from 16.6 to 19.3 years, whereas their partners ranged in age from 15.1 to 23.9 years. The participants and partners were ethnically and socioeconomically diverse, with 61% Caucasian, 18% African American, 21% Hispanic, and 2% Asian. The boy and girl were of the same ethnicity in 81% of the relationships.

### *Procedure*

We observed the participants and their partners interacting together in one session, and individually interviewed them about their romantic experiences in another session. They completed questionnaires between sessions. For purposes not germane to this particular paper, we also interviewed the participants about their relationships with parents and friends in two other sessions. The order of interviews and observations was counterbalanced across participants. Participants were paid \$80 for completing the entire project, whereas partners were paid \$60.

### *Observations*

The couples were videotaped during seven 6-minute discussions. The seven episodes were (1) a warm-up task in which they discussed what they would do after a plane crash, (2) a discussion of a problem the participant had outside the relationship, (3) a discussion of a problem the partner had outside the relationship, (4) a discussion of a goal the participant had, (5) a discussion of a goal the partner had, (6) a discussion of a problem in their relationship, and (7) a wrap-up discussion of the fun times in the relationship. The specific problems and goals discussed in each segment were determined by having each person independently generate lists immediately before the observation session. At the end of each segment, the two independently completed a series of questions about their interaction, the results of which are not presented here.

*Observational coding.* The interactions were coded using a version of the Interactional Dimensions Coding System (IDCS) that had been adapted for coding adolescent couples (Julien, Markman, Lindahl, Johnson, & Van Widenfelt, 1987). The two outside problem, two goal, and one relationship problem segments were each coded. The warm-up and wrap-up segments were not coded. To minimize halo effects, each segment was coded at a different time.

The adolescent version of the IDCS is a global coding system tapping 14 dimensions of behavior, affect, and relationship quality. Nine of the dimensions focus on each person's behavior and affect (communication skills, problem-solving skills, denial, withdrawal, support/validation, positive affect, negative affect, conflict, and dominance). The remaining five focus on the couple as a dyadic unit (positive escalation, negative escalation, satisfaction, mutuality, and overall relationship quality). For each of the five segments that were coded, the raters

assigned scores to each person on each of the nine individual dimensions and to the couple on each of the five dyadic dimensions. For purposes of data reduction, observational scale scores were calculated by averaging a participant's individual and dyadic dimension scores across the five tasks. Internal consistencies for these scale scores averaged across tasks were acceptable (mean  $\alpha = .80$ , range = .66–.88).

We conducted separate factor analyses of the scales for each person and the dyadic scale scores, as the APIM separates among these different types of variables. Principal axes analyses with oblique rotations yielded similar three-factor scores for the two sets of individual scores. The three factors were (1) Communication Skills, which comprised the communication skills, problem-solving skills, denial (negative loading), and withdrawal (negative loading) scales; (2) Conflict, which contained the conflict and dominance scales; and (3) Affective Expression, which consisted of support/validation, positive affect, and negative affect (negative loading) scales. For the dyadic scales, a principal axis analysis with an oblique rotation yielded a single Dyadic Positivity factor, which contained the positive escalation, negative escalation (negative loading), mutuality, relationship satisfaction, and overall relationship quality scales. Factor scores were derived by averaging the scale scores.

One rater coded all the videotaped segments, and a second coder rated a subset of 18% of segments for reliability purposes. Interrater reliabilities on the factors all exceeded .78 (mean  $r = .85$ ).

### *Romantic Interview*

Participants and partners were individually administered the RI. The RI was derived from the AAI (George, Kaplan, & Main, 1984), but was designed to assess working models of romantic relationships (Furman, 2001). Like the AAI, the RI is a semi-structured interview that typically takes between 45 min and an hour and a half to administer. Many questions are similar in intent and content to those of the AAI. For example, interviewees are asked to select five adjectives to describe particular romantic relationships and are asked to illustrate their adjectives with specific examples. They are asked what they did when they were upset, whether they have ever felt rejected, and what they have gained from their romantic relationships. Some modifications are included to take into account the differences between parent-child relationships and romantic relationships. For example, interviewees are asked what they did when they were upset, but not what they did

when they were hurt or ill, as adolescents do not commonly turn to romantic partners for support in these particular instances. Additionally, the RI includes questions about the caregiving and affiliative systems in romantic relationships as well as the attachment system. For example, the interview includes questions about how the participant responded when a partner was upset as well as what the participant did when he or she was upset.

*Coding of interviews.* The interviews were audio-taped and subsequently transcribed verbatim. Working models (states of mind) were primarily assessed using Main and Goldwyn's (1985) scales and Crowell and Owens's (1996) valuing of intimacy and autonomy scales. As in the coding of the AAI, these working model (state of mind) scale scores assess coherence of discourse and are the primary basis for deriving an overall classification of the working model as secure, dismissing, or preoccupied. (It is also possible for a transcript to be categorized as unresolved/disorganized or as cannot classify, but neither of these possibilities occurred in this particular subset of interviews.)

The nature of the analyses in the present study required continuous (vs. categorical) scores. Accordingly, the coders not only classified the transcript but they also rated how prototypically secure, dismissing, and preoccupied the transcript was on a 9-point scale (1 = *has none of the features of the type*, 9 = *prototypic instance*). These ratings were based on the same system as the classifications; in fact, discriminant function analyses using the three prototype ratings accurately predicted 100% of the boys' classifications and 98% of the girls' classifications.

All coders had attended Main and Hesse's Adult Attachment Workshop, had passed or subsequently passed Main and Hesse's reliability test, and had received additional training and practice on the coding of romantic narratives. Pairs of coders independently coded 21% of the transcripts in the overall study ( $n = 36$ ). Interrater agreement was satisfactory ( $\kappa = .72$ ). The reliability of the prototypic ratings was also satisfactory (mean  $r = .66$ , range = .64–.68).

### *Questionnaires*

*Behavioral Systems Questionnaire (BSQ).* The BSQ was used to assess participants' and partners' self-perceptions of romantic relational styles (Furman & Wehner, 1999). Participants and partners were each asked a series of questions about how they approach attachment, caregiving of the other, and affiliation in romantic relationships. Secure, dismissing, and

preoccupied romantic styles were each assessed with fifteen to twenty 5-point Likert items. Internal consistencies of the three style scores were all satisfactory (all Cronbach  $\alpha$ s  $> .85$ ). In several samples, BSQ romantic style scores have been found to be moderately to highly related to various attachment style measures, including Hazan and Shaver's (1987) measure, Collins and Read's (1990) Adult Attachment Scales, and Brennan, Clark, and Shaver's (1998) Experiences in Close Relationships measure (see Furman & Wehner, 2004).

## Results

### Preliminary Analyses

Before the central analyses, all variables were examined to see if the assumptions of univariate and multivariate analyses were met (Behrens, 1997). The skew and kurtosis were satisfactory on all variables. Outliers were found on four variables; their scores were adjusted to fall 1.5 times the interquartile range below the 25th percentile or above the 75th percentile. The interview was not administered to 1 girl, and 1 boy's interview did not record properly; similarly, 12% of the questionnaires were invalid, incomplete, or missing. The scores were imputed using full information maximum likelihood estimates (Anderson, 1957); such imputation approaches yield less biased results than either pairwise or listwise deletion (Schafer & Graham, 2002).

### Descriptive Information

Because gender was more likely to be important than whether one was a participant in the large project or a partner of the participant, we reorganized the data into scores for boys and girls (vs. participants and partners). In a series of supplementary analyses we examined the relations between project role (participant/partner) and the boys' and girls' observational scores, interview ratings, and self-report BSQ ratings. Only 1 of the 19 relations was significantly related ( $p < .05$ ). Thus, we did not include this variable in subsequent analyses.

With regard to the length of the romantic relationship, 31% were between 6 and 12 months long, 48% were between 13 and 24 months long, 14% were between 25 and 36 months long, and the remaining 6% were between 37 and 47 months long. We examined whether the duration of the romantic relationship was related to the boys' and girls' observational scores, interview ratings, self-report BSQ ratings, or concordance in views (the absolute

Table 2  
Means and Standard Deviations of Working Model, Styles, and Interaction Scores for Girls and Boys

	Girls		Boys	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Secure models	5.30	2.35	5.07	2.60
Secure styles*	4.19	0.41	3.91	0.49
Dismissing models*	3.21	1.98	4.05	2.33
Dismissing styles*	1.85	0.46	2.14	0.54
Preoccupied models*	3.12	2.07	2.39	1.88
Preoccupied styles	2.28	0.51	2.33	0.61
Communication skills	5.79	0.78	5.69	0.76
Conflict	3.68	0.88	3.67	0.80
Affective expression	4.97	0.79	4.82	0.63

Note. Working model and interaction scores could range from 1 to 9; BSQ style scores could range from 1 to 5.

BSQ, Behavioral Systems Questionnaire.

\*Girls' and boys' means differ significantly,  $p < .05$ .

difference in the boys' and girls' scores on the interview or BSQ rating). Only 1 of 25 relations was significant ( $p < .05$ ). Thus, we did not adjust for this variable in subsequent analyses.

Table 2 presents the means and standard deviations of the views and observational factors. With regard to the working model categories, 63% of the girls and 56% of the boys were classified as secure, 16% of the girls and 33% of the boys were categorized as dismissing, whereas 22% of the girls and 11% of the boys were categorized as preoccupied. The gender difference in categorization was statistically significant,  $\chi^2(2, N = 128) = 6.45, p = .04$ . Similarly, significant differences were found in the working model prototype ratings (see Table 2). Boys received higher dismissing ratings than girls,  $t(62) = 2.26, d = .28, p = .03$ , whereas girls received higher preoccupied ratings than boys,  $t(62) = 2.01, d = .25, p = .05$ . Similarly, the boys had higher dismissing style scores on the BSQ than girls,  $t(49) = 2.85, d = .40, p < .01$ , and girls had higher secure style scores than boys,  $t(49) = 2.42, d = .34, p = .02$ .

Table 3 presents the pattern of correlations among the variables. Girls' preoccupied working model and style scores were significantly correlated, and the dismissing working model style correlation approached significance. None of the boys' style scores were significantly related to their working model scores.

### Actor-Partner Interdependence Models

The APIMs were estimated in a series of structural equation models using AMOS 5.0 (Arbuckle, 1993).

Table 3  
Correlations Among Primary Variables

	1	2	3	4	5	6	7	8	9	10
1. Secure models	.31**	.21 <sup>+</sup>	-.54*	-.17	-.56**	-.18	.38**	-.54**	.45**	.50**
2. Secure styles	.14	-.04	-.14	-.66**	-.15	-.19	.13	-.22 <sup>+</sup>	.23 <sup>+</sup>	.27*
3. Dismissing models	-.75**	-.10	.22 <sup>+</sup>	.16	-.28*	-.02	-.26**	.16	-.21 <sup>+</sup>	-.23 <sup>+</sup>
4. Dismissing styles	-.21	-.66**	.13	.15	.03	.19	-.19	.11	-.21 <sup>+</sup>	-.22 <sup>+</sup>
5. Preoccupied models	-.27*	-.09	-.35**	.15	.06	.29*	-.10	.37**	-.21 <sup>+</sup>	-.23 <sup>+</sup>
6. Preoccupied styles	-.05	-.59**	.00	.55**	.03	.32*	-.17	.19	-.22 <sup>+</sup>	-.15
7. Communication skills	.39**	-.07	-.39**	-.20	.07	.07	.67**	-.62**	.78**	.68**
8. Conflict	-.06	.01	-.04	.20	.08	.19	-.58**	.89**	-.74**	-.83**
9. Affective expression	.15	-.17	-.10	-.02	.05	.04	.70**	-.65**	.54**	.84**
10. Dyadic positivity	.14	-.07	-.17	-.18	.11	-.11	.67**	-.81**	.74**	1.00

Note. Correlations among the girls' scores are above the diagonal; correlations for the boys are below the diagonal. The diagonal depicts the correlations between the corresponding scores for the boys and girls in dyads. The dyadic positivity variable is the same for boys and girls. <sup>+</sup>*p* < .10, \**p* < .05, \*\**p* < .01.

The structural model depicted in Figure 1 was estimated for each type of view and the three observational factors of Communication Skills, Affective Expression and Conflict. We could not differentiate between actor and partner effects on the dyadic positivity observational factor as this score reflected the behavior of both individuals. We were, however, able to examine the links between the boys' and girls' views and dyadic behavior using the structural model depicted in Figure 2.

Because all variables were manifest variables, this procedure is essentially a constrained set of multiple regression equations. Thus, the usual requirements

for sample size in latent variable SEM do not apply; instead, the rules for sample size in multiple regression apply and were met (Kenny & Cook, 1999). In light of these rules, we separately analyzed the six view variables (three working models, three styles).

We derived the interaction terms by centering the scores and calculating their interaction (Aiken & West, 1991); scores were centered on the mean of the entire sample (Kenny & Cook, 1999). No gender differences in paths were predicted, and we wanted the most parsimonious structural model that fit. Accordingly, as recommended by Kenny and Cook

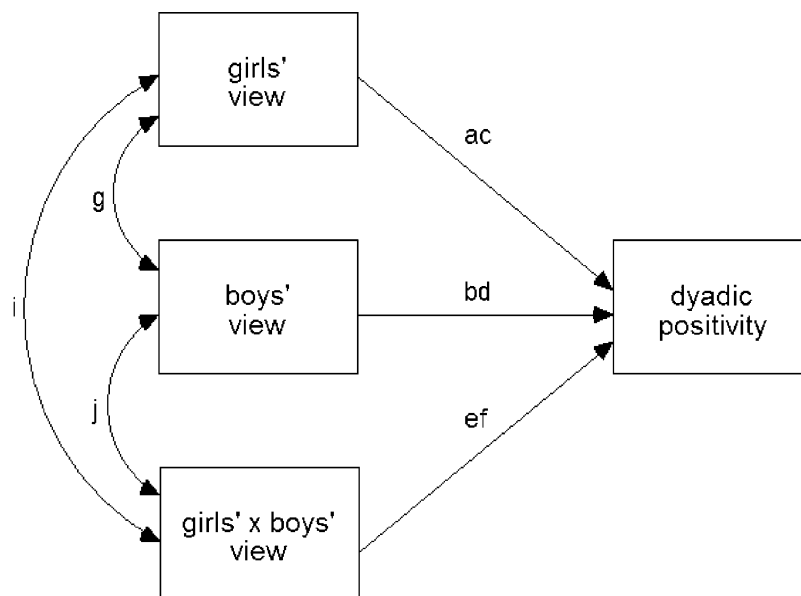


Figure 2. Structural Equation Model of Views and Dyadic Positivity.



(1999), we constrained the two unstandardized actor paths a and b to be equal, the two unstandardized partner paths c and d to be equal, and the two actor by partner interaction paths e and f to be equal. In the analyses of the dyadic positivity variable, we constrained the boys' and girls' paths to be equal. Because the tables depict standardized (vs. unstandardized) coefficients to facilitate comparisons of different paths, the paths in a constrained pair may differ slightly in the tables. The chi-square goodness of fit model was used to test the model fit. If a structural model did not provide an adequate fit to the data (i.e.,  $p > .05$ ), we eliminated the equality constraint on the actor, partner, or actor by partner effects or some combination of effects until an adequate fit was obtained. In all such cases, the unconstrained fit was significantly better than the constrained fit. In two analyses of dyadic positivity, we needed to unconstrain the boys' and girls' paths, which resulted in a just identified structural model; what is of primary interest, however, is not the model fit, but whether specific paths were significant or not.

*Actor and dyad effects.* Security of views was predicted to be positively associated with one's own communication skills and the positivity of one's affective expression. Ratings of security were also expected to be negatively associated with one's conflict behavior. Finally, security of views was expected to be related to greater dyadic positivity. Table 4 presents a summary of the final structural equation models for secure views. The actor and dyad effects are depicted in the first two columns of numbers (G View G Obs path a & B View B Obs path b). In terms of working model security, all four hypotheses received support for girls. For boys, security of working models was only significantly related to communication skills. With regard to secure styles, none of the hypotheses were supported.

Next, we examined the dismissing and pre-occupied views to determine the specific nature of these links with security-insecurity of views. When the paths are significant for the secure rating and one of the insecure ratings (e.g., dismissing but not pre-occupied), the effect reflects a difference between security and that particular form of insecurity (e.g., secure vs. dismissing). When the paths are significant for the secure rating and not for the insecure ratings, the effect reflects a difference between secure and insecure views in general.

We hypothesized that more dismissing view ratings would be negatively associated with one's own communication skills and the tenor of one's affective expression. More dismissing views were also ex-

Table 4  
Summary of Structural Equation Models with Secure Views Predicting Observational Factors

	Actor/Dyad Effects		Partner Effects		Actor by Partner Effects		Covariances		Fit Index $\chi^2$ ; df; $p$ value
	G View G Obs. Path a	B View B Obs. Path b	G View B Obs. Path c	B View G Obs. Path d	G × B G Obs. Path e	G × B B Obs. Path f	G Obs B Obs. Cov. g	G Obs B Obs. Cov. h	
<b>Secure models</b>									
Communication	.29**	.33**	.22**	.23**	-.07	-.07	.31*	.59**	$\chi^2(3) = 5.17, p = .16$
Conflict (A, P) <sup>a</sup>	-.57**	.17	-.39**	.13	.09	.09	.31*	.67**	$\chi^2(1) = 0.58, p = .45$
Affective expression (A, P) <sup>a</sup>	.48**	.04	.35**	-.09	.00	-.01	.32*	.46**	$\chi^2(1) = 0.00, p = .95$
Dyadic positivity (A) <sup>a</sup>	.51**	-.02	-	-	-.04	-	.32*	-	$\chi^2(0) = 0.00, na$
<b>Secure styles</b>									
Communication	.05	.06	.12	.14	.15	.14	-.09	.66**	$\chi^2(3) = 1.87, p = .60$
Conflict	-.06	-.07	-.12	-.13	-.01	-.01	-.07	.72**	$\chi^2(3) = 2.86, p = .41$
Affective expression	.00	.01	.15	.13	.00	.01	-.09	.54**	$\chi^2(3) = 5.57, p = .14$
Dyadic positivity	.11	.13	-	-	.05	-	-.07	-	$\chi^2(1) = 3.52, p = .06$

Note: G = girl; B = boy; Obs = observational factor. The table depicts standardized path or covariance (cov) coefficients. Covariances i and j are not presented in these tables, as they simply reflect the covariation between the interaction term and its components, and are thus of little interest.

<sup>a</sup>The terms in parentheses indicate that the two actor (A) or two partner (P) paths were not constrained to be equal. If no letter is indicated, then all pairs of paths were constrained to be equal.

\* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ .

Table 5  
Summary of Structural Equation Models with Dismissing Views Predicting Observational Factors

	Actor/Dyad Effects		Partner Effects		Actor by Partner Effects		Covariances		Fit Index $\chi^2$ ; df; p value
	G View G Obs. Path a	B View B Obs. Path b	G View B Obs. Path c	B View G Obs. Path d	G × B G Obs. Path e	G × B B Obs. Path f	G View B View Cov. g	G Obs B Obs Cov. h	
Dismissing models									
Communication	-.26**	-.31**	-.14*	-.17*	-.07	-.07	.22*	.63**	$\chi^2(3) = 1.00, p = .80$
Conflict	-.13*	-.17*	-.02	-.02	.20*	.22*	.22*	.72**	$\chi^2(3) = 4.31, p = .23$
Affective expression	-.10	-.14	-.09	.09	-.03	-.03	.22*	.53**	$\chi^2(3) = 2.09, p = .55$
Dyadic positivity	-.14*	-.17*	-	-	-.09	-	.22*	-	$\chi^2(1) = 0.14, p = .71$
Dismissing styles									
Communication	-.17*	-.19*	-.15*	-.18*	.08	.08	.13	.64**	$\chi^2(3) = 0.42, p = 0.94$
Conflict	.03	.03	.12	.13	-.07	-.07	.15	.73**	$\chi^2(3) = 1.62, p = 0.65$
Affective expression	-.06	-.08	-.13	-.13	-.01	-.01	.13	.53**	$\chi^2(3) = 4.42, p = .22$
Dyadic positivity	-.16*	-.19*	-	-	.05	-	.13	-	$\chi^2(1) = 0.57, p = .45$

Note: G, girls; B, boy; Obs, observational factor. The table depicts standardized path or covariance (cov) coefficients. Covariances i and j are not presented in this table, as they simply reflect the covariation between the interaction term and its components, and are thus of little interest.

\*The terms in parentheses indicate that the two actor (A) or two partner (P) path were not constrained to be equal. If no letter is indicated, then all pairs of paths were constrained to be equal.  
\* $p < .10$ , \* $p < .05$ , \*\* $p < .01$ .

pected to be associated with lower dyadic positivity. Table 5 presents a summary of the final structural equation models for dismissing views. As hypothesized, the dismissing working model scores were significantly negatively associated with both their own communication skills and dyadic positivity, but these scores were not associated with their own affective expression. Just as with working models, the dismissing style scores were significantly negatively associated with communication skills and dyadic positivity; dismissing style scores were not associated with affective expression or conflict.

We predicted that those with more preoccupied views would engage in more conflict and be lower in dyadic positivity. Table 6 presents a summary of the final structural equation models for preoccupied views. With regard to working models, greater ratings of preoccupation were related to greater conflict for both boys and girls, but were not related to affective expression. Preoccupied style scores were not related to conflict, but were negatively associated with the tenor of affective expression for girls.

*Positive and negative affect.* In the analyses of affective expression, we found that more secure working models were associated with a more positive tenor of affective expression. We had also expected that more dismissing working models would be associated with lower scores on affective expression because of less positive affect, and more preoccupied working models would be associated with lower scores on affective expression because of more negative affect. Neither of the latter two hypotheses was supported at the factorial level, but we conducted an exploratory analysis of the positive and negative affect scale scores to identify the specific nature of the effect of security on overall affective expression and determine if there were differential relations for the specific scales. As shown in Table 7, there were significant actor effects of security on both positive affect and negative affect. Higher ratings of security of the working model were related to higher ratings of positive affect,  $bs = .18$  and  $.25, ps < .01$ , and lower ratings of negative affect,  $bs = .26$  and  $.28, ps < .01$ . Higher ratings of dismissing working models were related to lower levels of positive affect,  $bs = -.13$  and  $-.20, ps = .04$ . Higher ratings of preoccupation tended to be associated with more negative affect,  $bs = .16$  and  $.17, ps = .054$ .

*Partner effects.* We predicted that the partner effects would parallel the actor effects, but we expected fewer or weaker effects as the links were less direct. The path coefficients of the partner effects are depicted in the third and fourth column of numbers in Tables 4–6 (G View B Obs Path c & B View G Obs

Table 6  
Summary of Structural Equation Models with Preoccupied Views Predicting Observational Factors

	Actor/Dyad Effects		Partner Effects		Actor by Partner Effects		Covariances		Fit Index
	G View G Obs.	B View B Obs.	G View B Obs.	B View G Obs.	G × B G Obs.	G View G Obs.	G View B View	G Obs B Obs	
	Path a	Path b	Path c	Path d	Path e	Path f	Cov g	Cov h	
Preoccupied models									
Communication	-.02	-.02	-.08	-.07	.09	.08	.06	.66**	$\chi^2(3) = 1.20, p = .75$
Conflict	.36**	.34**	.14 <sup>+</sup>	.12 <sup>+</sup>	.13	.13	.06	.72**	$\chi^2(3) = 5.37, p = .15$
Affective expression	-.08	-.09	-.06	-.04	.04	.05	.06	.54**	$\chi^2(3) = 3.22, p = .36$
Dyadic positivity (A) <sup>a</sup>	-.24*	.15	-	-	-.11	-	.06	-	$\chi^2(0) = 0, na$
Preoccupied styles									
Communication	-.08	-.05	-.09	-.12	-.06	-.05	.35*	.66**	$\chi^2(3) = 2.76, p = .43$
Conflict	.08	.10	.10	.12	-.04	-.05	.34*	.71**	$\chi^2(3) = 3.69, p = .30$
Affective expression (A) <sup>a</sup>	-.23*	.14	-.15	-.14	-.15	-.19	.36*	.57**	$\chi^2(2) = 0.54, p = .76$
Dyadic positivity	-.10	-.13	-	-	-.03	-	.35*	-	$\chi^2(1) = 0.06, p = .80$

Note. G, girl; B, boy; Obs, observational factor. The table depicts standardized path or covariance (cov) coefficients. Covariances i and j are not presented in these tables, as they simply reflect the covariance between the interaction term and its components, and are thus of little interest. The two actor (A) or two partner (P) path were constrained to be equal. If <sup>+</sup> $p < .10$ , \* $p < .05$ , \*\* $p < .01$ .

Table 7  
Summary of Structural Equation Models with Working Models Predicting Positive and Negative Affect

	Actor/Dyad Effects		Partner Effects		Actor by Partner Effects		Covariances		Fit Index
	G View G Obs.	B View B Obs.	G View B Obs.	B View G Obs.	G × B G Obs.	G × B B Obs.	G View B View	G Obs B Obs	
	Path a	Path b	Path c	Path d	Path e	Path f	Cov g	Cov h	
Secure Models									
Positive affect	.18**	.25**	.14	.12	.01	.02	.32*	.57**	$\chi^2(3) = 5.76, p = .12$
Negative affect	-.26**	-.28**	-.07	-.08	.01	.01	.32*	.42**	$\chi^2(3) = 4.94, p = .18$
Dismissing models									
Positive affect	-.13**	-.20*	-.14	-.13	-.01	-.02	.22 <sup>+</sup>	.57**	$\chi^2(3) = 3.32, p = .35$
Negative affect	.07	.09	.03	.03	.04	.04	.22 <sup>+</sup>	.44**	$\chi^2(3) = 3.02, p = .39$
Preoccupied models									
Positive affect	-.01	-.01	-.01	-.01	.03	.04	.06	.60**	$\chi^2(3) = .54, p = .91$
Negative affect	.17 <sup>+</sup>	.16 <sup>+</sup>	.10	.09	-.09	-.09	.06	.43**	$\chi^2(3) = 2.60, p = .46$

Note. G, girl; B, boy; Obs, observational factor. The table depicts standardized path or covariance (cov) coefficients. Covariances i and j are not presented in these tables, as they simply reflect the covariance between the interaction term and its components, and are thus of little interest. Each pair of paths was constrained to be equal.

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

path d). (There are no possible partner effects for the dyadic positivity variable—only a dyadic effect).

The security of both boys' and girls' working models was positively related to the partners' communication skills; the security of girls' working models was also positively related to the boys' tenor of affective expression and inversely related to the boys' conflict behavior. The security of styles was unrelated to any of the partner factors.

Dismissing working model ratings were inversely related to the partners' communication skills but not to the other two partner factors. The relation between dismissing styles and partners' communication approached statistical significance, but otherwise dismissing styles were unrelated to the partners' behavior. The preoccupied working models and style scores were unrelated to the partners' behavior.

We hypothesized that the partner effects were mediated by the effect of the partners' views on the partners' behavior, which in turn affect the actors' behavior. To test this hypothesis, we replaced the residual covariance between the boys' and girls' behavior (covariance *h*) with two paths: one from the girls' behavior to the boys' behavior, and one from the boys' behavior to the girls' behavior. These two paths were constrained to be equal. Next we examined structural models in which the two paths reflecting partner effects (paths c and d) were removed from the structural model. If the effects of the partners' views on the actors' behavior are fully mediated through the partners' behavior, the structural models without the two paths reflecting partner effects should fit the data as well as the structural models with the two paths. Additionally, we should obtain significant effects for partners' views on the partners' behavior and the partners' behavior on the actors' behavior.

These analyses were conducted on the four variables, which had significant partner effects. In all cases, the pattern of relations was consistent with a mediational model. All structural models without the two partner paths provided adequate fits to the data; the inclusion of the two partner paths did not improve the fit. The partner paths were not significant. The significant actor effects in the original structural models remained significant. The two paths between the behaviors were significant.

*Interaction effects.* We also examined whether the configuration of the boys' and girls' views would be related to the behavior. The path coefficients are presented in the fifth and sixth column of numbers in Tables 4–6 ( $G \times B$  G Obs path e and  $G \times B$  Obs path f). No predictions were made regarding these interactions, and no interactions were significant.

*Concordance in girls' and boys' views.* The degree of concordance was examined by looking at the covariation between the girls' and boys' views in the SEM. These effects are depicted in the seventh column of numbers in Tables 4–6 ( $G$  View B View covariance g). We predicted a moderate level of concordance. The concordance was significant for the working model ratings of security, but not for the secure style scores. It approached significance for the dismissing working model scores but not for the dismissing style scores. The concordance was not significant for the preoccupied working model ratings, but was significant for the preoccupied style scores.

## Discussion

Consistent with attachment and behavioral systems theory, views of romantic relationships were associated with patterns of interaction. The effects were, however, stronger for working models, especially for girls.

### *Actor Effects*

Some effects reflected differences between secure and insecure views in general, but in other cases the difference was between secure views and a particular form of insecure views. As predicted, ratings of working model security were positively associated with communication skills by oneself, whereas ratings of both dismissing working models and styles were inversely related to communication skills. Those with more secure views may be more able or willing to talk directly about their concerns and their partner's concerns, whereas those with more dismissing working models may be more likely to minimize such concerns or withdraw. Conversely, successful communications about concerns may promote more secure working models, whereas avoiding such topics may promote a tendency to discount or dismiss the significance of these relationships.

As predicted, ratings of working model security for girls were also inversely related to conflict by them, whereas ratings of preoccupation for both boys and girls were positively related to each person's conflictual behavior. Styles were not related to conflict. Those with more preoccupied working models may be more likely to engage in conflictual behavior as a way of expressing their heightened concerns or getting their partner's attention. This idea is consistent with findings that those reporting

high levels of anxiety over abandonment or concern about whether their partner loves them are more likely to display dysfunctional anger (Kobak & Hazan, 1991). Conversely, conflicts may raise the degree of uncertainty about their partners' availability, interest, or ability to meet their needs, fostering more preoccupied working models.

As expected, working model security was also related to affective expression; interestingly, follow-up analyses revealed that the links with preoccupied and dismissing working models differed for positive and negative affect. Specifically, more preoccupied models tended to be associated with more negative affect, and more dismissing models were associated with less positive affect. Together, these findings support the idea that working models serve as emotion regulation systems (Kobak, Cole, Ferenz-Gillies, & Fleming, 1993). Those with preoccupied models may more readily experience negative affect in interpersonal exchanges and be less skilled in modulating these feelings in a way that is constructive for themselves and the relationship. On the other hand, those with dismissing models may be more likely to deactivate the attachment or other behavioral systems and experience or express positive emotions less frequently. One might have expected those with more dismissing models to experience direct negative emotions less frequently as well, but no such effect was found. We believe that they probably did display fewer exaggerated or direct expressions of negative affect, but they may have displayed indirect expressions of negative affect. In the process of withdrawing from sensitive topics or denying conflicts, those with dismissing models may display stone-faced expressions or other indirect negative expressions. Future work may want to differentiate between exaggerated direct expressions of negative affect that would be expected to be associated with hyperactivation, and indirect expressions that may serve a distancing function.

Finally, ratings of all three views were associated with dyadic positivity. Both working model and style dismissing scores were inversely related to dyadic positivity. Girls' preoccupied working model scores were also inversely related, whereas girls' secure working model scores were positively related. Such links may stem from the differences in communication, conflict, and affective expression previously discussed. Additionally, the dyadic dimension captures the reciprocity of the two's behavior. Those who are more secure may be more likely to respond more positively and less negatively than those who are insecure.

### *Partner Effects*

We found 11 actor effects and 6 partner effects, as well as 6 dyad effects. The difference in the number of actor and partner effects approached significance,  $p < .10$ . This study, along with that by Campbell et al. (2001), is one of the first studies to properly test for and demonstrate partner effects of working models or styles on romantic interactions. Such partner effects are noteworthy, as the APIM analyses take into account the influence of the partner's views on the partner's behavior. Actor and partner effects are not confounded and covariation between the two people's views is controlled for. Thus, independent of one's own views, the view of one's partner is related to one's behavior. Independent of the partner's view, one's own view is related to the partner's behavior. For example, a more dismissing view by one person is associated with poorer communication skills by the other. These findings complement the experimental literature, demonstrating that expectations can lead to responses from others that are consistent with those expectations (see Snyder, 1984). They are consistent with Bowlby's (1973) idea that working models may be confirmed through interactions with others.

Follow-up analyses indicated that these relations appear to be mediated by the partner's behaviors. That is, it appears that a partner's views may affect his or her own behavior, which in turn may elicit different forms of behavior from the other. To the best of our knowledge, this is one of the first studies to distinguish between direct and mediated partner effects.

Because the study was cross-sectional, we are inherently limited in drawing inferences about the direction of effects between behavior and views. Although the working models depicted paths from working models to behavior, it is also possible that views are influenced by the experiences in the relationship. Views could be influenced either by the partner's behavior or by the influence of the partner's behavior on one's behavior, which in turn may affect one's own views. In effect, views may accommodate to one's experiences, as Bowlby (1973) suggested.

The APIM used in the present study provides a means for analyzing the interdependence that occurs between individuals in close relationships. Much of the past work has only examined the role of one person in a dyad, or has examined the role of both separately, without taking into account the interdependence of the two. The APIM has the potential to shed new insights into how actors and partners

may jointly affect the course of their interactions with each other.

### *Configuration of Views*

Past work has sometimes found that the configuration of the two views was related to patterns of interaction. For example, Senchak and Leonard (1992) found that marital adjustment was greater when both were secure than when either or both were insecure. We found no evidence that the configuration of views was related to patterns of interactions. Instead, each person's view independently played a role, or the girl's view alone was related. This study and a study of college students (Creasey, 2002) did not find the configuration to be predictive of interactions, but the configuration was predictive in two studies of marital couples (Cohn et al., 1992; Senchak & Leonard, 1992). The difference in findings could reflect a developmental difference or a difference in the seriousness of the relationships.

### *Concordance of Views*

Within a romantic dyad, the boys' and girls' working model ratings of security were significantly related to each other, and their dismissing ratings tended to be correlated with each other. Ratings of preoccupation on the BSQ ratings were also related to each other. Such concordance could stem from whom one either selects or retains as a partner, or the influence each person may have on the other. In any case, it is not evident why concordance was found in some instances and not in other instances; instead, it seems most prudent to simply conclude that only a modest level of concordance was found.

### *Gender Differences*

The gender differences in styles and working models were consistent with past research. Specifically, more males have dismissing romantic styles, whereas more females have secure styles (Mickelson, Kessler, & Shaver, 1997). Gender differences have not been found in working models of parents in adult samples (see van IJzendoorn & Bakermans-Kranenberg, 1996), but in adolescent samples, more boys have been found to be dismissing or deactivating and more girls to be preoccupied or hyperactivating (Adam, Sheldon-Keller, & West, 1996; Kobak et al., 1993).

Not only were there gender differences in the mean levels of working models and styles, but there were also more links between girls' views and be-

havior than boys' views and behavior. Specifically, eight significant effects at the factor level were found for both boys' and girls' views, but in another nine instances, only the effects for girls' views were significant. The difference in the proportion of significant effects for boys and girls is significant,  $p < .01$ . The fact that the variability in girls' views was more predictive than the variability in boys' views cannot be attributed to the gender differences in mean levels of views. The mean differences are comparisons *between* the two genders, whereas the differential pattern of relations reflects the predictive power of the variability in views *within* each gender. The latter type of difference has received less attention and was not anticipated. Theoretically, both boys' and girls' views should be related to be patterns of interaction, as such patterns of interaction should be an important basis for their views and be affected by their representations. One possibility is that adolescent boys' views are not as well developed as those of girls, and thus may not be as closely linked to patterns of interaction. Views of romantic relationships are linked to views of friendship (Furman et al., 2001). Because adolescent boys' friendships are characterized by less intimate disclosure than girls' friendships (Furman & Buhrmester, 1992; Hunter & Youniss, 1982; Sharabany, Gershoni, & Hoffman, 1981), they may have less of a foundation for forming expectations and representations of this newly emerging type of intimate relationship. Given their relative inexperience in intimate disclosure, boys may turn to their partners for guidance in these situations. Consistent with this idea, boys' behavior was linked to the girls' working models as often as to their own models.

Alternatively, the gender differences may not be limited to adolescence. Past work has found that females think more about relationships (Acitelli & Young, 1992) and may be more sensitive barometers of the quality of the relationship (Floyd & Markman, 1983). Gender differences have been found in many studies examining links between views and interactions in adulthood (e.g., Alexandrov et al., 2005; Creasey, 2002; Paley et al., 1999; Simpson et al., 2002), although not in all instances (e.g., Crowell et al., 2002). Simpson et al. (2002) suggested that women's attachment systems (and their representations of such) might be activated more readily by less stressful events than men's systems. According to this hypothesis, men's views may be as linked to patterns of interaction at times of severe or chronic stress. Alternatively, romantic interactions are likely to be influenced by multiple factors, including not only views but also social norms and sex role or-

orientations. For girls, each of these factors typically emphasizes an interpersonal or relational orientation, whereas for boys independence and strength are often stressed. Thus boys' behavior may be influenced more by these gendered social factors than their views per se. It is important, however, not to overstate the seeming gender differences, as approximately half of the effects were the same for boys and girls.

#### *Working Models and Styles*

The significant findings for working models and styles were in line with the hypotheses, but the self-report styles were not as consistently related to patterns of interaction as the working models were. Eighteen significant effects at the factor level were found with the working model prototype ratings, but only five were found with the BSQ style ratings, a statistically significant difference,  $p < .01$ . Past investigators have found significant links between styles and interactions (e.g., Collins & Feeney, 2000; Rholes et al., 1999; Simpson et al., 1992, 2002). Sometimes, however, significant findings have been found on only some observational variables or on only one of the attachment dimensions. Thus, the number of styles effects found here is not that different from prior work.

In effect, it appears that the working model measures are more related to patterns of interaction than styles are. It is possible that some participants may not be very aware of how they approach their romantic relationships, and they may inaccurately describe their approaches on self-report measures. In contrast, the working model ratings are not simply based on what those being interviewed say they do; instead, they are derived from careful coding of the total transcripts. In some instances, individuals may make claims about their relationships that are not credible because they are belied by other statements during the interview; in such cases, the coder may find their answers to be reflective of a different working model than the participant may think. In any case, this difference between the self-perceived styles and their internalized working models is reflected in the low correlations between the two types of measures, a common finding in the literature (Crowell et al., 1999).

In contrast to the present study, Simpson et al. (2002) did find comparable sized effects on their working model and style measures. However, they assessed working models of parents with the AAI, whereas their style questionnaire focused on romantic relationship. Thus, the nature of the re-

lationship (parent vs. romantic partner) and nature of the representation (working model vs. style) were confounded. The present study contributes by being one of the first studies to examine working models and styles for the same type of relationship. Both working model and style measures have proven quite valuable, but we still have almost no direct evidence about the similarities and differences in their links with other variables. We hope that this study will encourage such research and promote the integration of two relatively disparate fields.

#### *Limitations and Future Directions*

The demonstration of links between views and patterns of interaction in adolescent romantic relationships has important theoretical implications and provides validation evidence for the measurement of views and interactions used here. The present study only examined the links with views of romantic relationships, and not those of other close relationships, such as with parents or friends. Theoretically, we would expect the strongest associations to be with views of romantic relationships (Furman & Wehner, 1994), but this hypothesis remains to be tested empirically. Even if the hypothesis proves true, it would be important to delineate the links that views of each type of relationship may have.

A contribution of the present study was to demonstrate that associations between romantic views and interactions were already apparent in adolescence. Prior work has focused on married couples, but it appears that romantic views may already be important when they are still in a relatively formative stage. The participants in the present sample, however, were all in relatively long relationships (6 months minimum). An important step will be to determine if views are associated with behaviors in shorter relationships or earlier in adolescence.

Finally, the current study is cross-sectional in nature. In effect, causal inferences about the direction of the relations between views and behaviors cannot be drawn. Longitudinal work will be required to determine if views affect patterns of interactions in subsequent relationships and if patterns of interaction influence subsequent views. It is hoped that the present demonstration of links at one point in time may foster such work. An understanding of the links between representations and behavior seems central to the study of close relationships.

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