Predicting romantic involvement, relationship cognitions, and relationship qualities from physical appearance, perceived norms, and relational styles regarding friends and parents

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ABSTRACT

Using a sample of 199 adolescents, the present study examined Furman and Wehner's (1999) hypothesis that the predictors of the degree of romantic involvement and the predictors of romantic relationship cognitions and qualities differ. As hypothesized, physical appearance and friends' normative romantic involvement were related to the degree of casual and serious romantic involvement, whereas relational styles regarding friends and parents were unrelated in almost all cases. On the other hand, relational styles regarding friends and parents were related to supportive and negative romantic interactions and romantic styles. In contrast, physical appearance and friends' normative romantic involvement were generally unrelated to interactions and romantic styles. Physical appearance was also related to romantic appeal and satisfaction.

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Romantic experiences are a central part of most adolescents' lives. In early adolescence, youth begin to interact more frequently in mixed-sex groups (Connolly, Craig, Goldberg, & Pepler, 2004). These groups often lead to group dating and eventually dyadic dating. By middle adolescence, most have begun dating (Feiring, 1996), and many have boyfriends or girlfriends. For example, 56% of girls and 49% of boys who are 15-years-old report having a "special" romantic relationship in the last 18 months (Carver, Joyner, & Udry, 2003). These romantic experiences and relationships are hypothesized to have a significant impact on many facets of psychosocial development and adjustment (Furman & Shaffer, 2003).

One of the fundamental challenges researchers face is identifying the features that are most important to understanding romantic experiences. One reason this task is challenging is because the study of adolescent romance involves more than examining the characteristics of a particular dyadic relationship. Over the course of time, most adolescents have a number of different romantic relationships. The number, as well as the characteristics of particular relationships, is important to consider. Moreover, individuals have emotions or cognitions about romantic experiences, regardless of whether they are in a relationship or not. Consistent with Brown, Feiring, and Furman (1999), we use the term *romantic experiences* to refer to this broad range of experiences and cognitions, including both those within and those outside of particular dyadic relationships.

Adolescent romantic experiences can be analyzed or dissected in multiple ways that capture the peer context. Collins (2003) proposed a framework that described features at five levels of analysis: 1) romantic involvement–the frequency, consistency, and length of dating and relationships; 2) partner identity–the characteristics of the romantic partner, 3) content–what the two do together, 4) relationship quality–supportive and negative interchanges, and 5) cognitive and emotional processes–perceptions, attributions, and emotions associated with the romantic relationship experience.

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Existing research has examined these five different aspects of romantic experience, particularly the levels of romantic involvement, relationship quality, and cognitive and emotional processes (see review in Collins, Welsh, & Furman, 2009). At the same time, it is difficult to integrate the literature at the different levels, because different psychosocial correlates or predictors have been examined. Additionally, few investigators have examined features at multiple levels simultaneously (but see Connolly, Furman, & Konarski, 2000; Kuttler & La Greca, 2004; Zimmer-Gembeck, Siebenbruner, & Collins, 2001). Yet, it is seems likely that the determinants and consequences of features at the different levels may differ.

In an effort to integrate these levels, Furman and Wehner (1994) proposed that the determinants of the timing and degree of romantic involvement generally differed from those of romantic relationship quality and cognitive representations of relationships. Specifically, they hypothesized that variation in timing and degree of involvement would be strongly influenced by biological maturity, norms, and peer prestige variables. In particular, biological maturation is associated with an increased interest in sexual behavior and romantic interests; romantic interactions often begin to emerge with such interests (Miller & Benson, 1999). The timing and degree of romantic involvement is also strongly affected by cultural norms (Brown, Larson, & Saraswathi, 2002). Marked variation is also expected within a culture. Parents typically have expectations and rules regarding the timing and degree of romantic involvement, even as their offspring are on the verge of leaving home (Madsen, 2008). Peer norms regarding romantic involvement also play a role (Brown, 1999); for example, early adolescents are more likely to date if their peers are dating as well (Friedlander, Connolly, Pepler, & Craig, 2007). Finally, peer prestige variables, such as perceived popularity and physical attractiveness, can affect one's ability to initiate and establish romantic relationships (Brown, 1999). Consistent with this idea, physical attractiveness has been related to the frequency of dating and degree of romantic involvement in adolescence and adulthood (Feingold, 1990; Furman, Low, & Ho, 2009; Langlois et al., 2000).

Regarding romantic relationship cognitions, Furman and Wehner (1994) hypothesized that biological maturity, norms, and prestige variables would be less predictive. Instead, they expected that cognitive representations of relationships with friends and parents would be related to their cognitive representations of romantic relationships. That is, adolescents have preconceptions or expectations of romantic relationships that are partially based on their expectations and experiences in other close relationships. In support of this hypothesis, romantic relational representations in middle and late adolescence are associated with representations regarding parents and especially representations regarding friends (Furman, 1999; Furman, Simon, Shaffer, & Bouchey, 2002).

Cognitive representations are also expected to serve as a basis for guiding and predicting adolescents' behavior. Consistent with this idea, representations of romantic relationships are related to the quality of romantic relationships in late adolescence (Furman & Simon, 2006). In fact, because representations of relationships with parents and friends were expected to be related to representations of romantic relationships, representations of relationships with parents and friends were also expected to be related to romantic relationship qualities.

Current study

The primary purpose of the present study was to test Furman and Wehner's (1994) hypothesis by simultaneously examining predictors of multiple levels of romantic experience. In particular, we examined how romantic involvement of friends, physical appearance and cognitive relational styles regarding parents and friends were related to casual and serious romantic involvement, romantic relational styles, supportive and negative romantic interactions, romantic life satisfaction, and romantic appeal.

We hypothesized that physical appearance and friends' romantic involvement would be associated with both casual and serious romantic involvement, but cognitive relational styles regarding parents and friends would not be. On the other hand, we expected that relational styles regarding parents and friends would be related to romantic styles and relationship qualities. Specifically, more avoidant styles regarding relationships with friends and parents were expected to be associated with more avoidant romantic styles and less support. More anxious styles regarding friends and parents were expected to be related to more anxious romantic styles, less romantic support, and more negative romantic interactions. We did not expect that either physical appearance or friends' romantic involvement would be related to romantic relationship styles.

Finally, we were interested in knowing how physical appearance, friends' romantic involvement, and relational styles regarding parents and friends were related to romantic satisfaction and romantic appeal. Satisfaction with a particular relationship has been a central variable in the marital and adult romantic relationship fields for many years (Rosen-Grandon, Myers, & Hattie, 2004) and has recently received some attention in the adolescent romantic relationship field (e.g., Bentley, Galliher, & Ferguson, 2007). Little, however, is known about overall satisfaction with one's dating or romantic life, but it is important to consider overall satisfaction as most adolescents are likely to have had a series of relationships over time, rather than one ongoing one. Additionally, many will not be in a relationship at a particular time or may not have the number or type of relationships they desire. Adolescents' feelings of satisfaction or dissatisfaction regarding the relationships they have had (or not had) may play an important role in their current psychosocial adjustment and their subsequent romantic experiences. Similarly, perceptions of being romantically appealing or unappealing may also play an important role. Consistent with this idea, perceptions of romantic appeal are positively associated with romantic competence, global self-esteem and social acceptance, and negatively associated with social avoidance and fear of negative evaluations (Bouchey, 2007). We expected that both the degree of romantic involvement and the quality of romantic experiences would be associated with both romantic satisfaction and appeal. Accordingly, the variables that were expected to be related to romantic involvement (physical appearance and friends' romantic involvement) and the variables expected to be related to relationship quality (relational styles regarding friends and parents) were expected to be linked to romantic satisfaction and appeal as well.

Method

Participants

The participants were part of a longitudinal study investigating the role of relationships with parents, peers, and romantic partners on adolescent psychosocial adjustment. Two hundred 10th grade high school students (100 boys, 100 girls) were recruited from a diverse range of neighborhoods and schools in a large Western metropolitan area by distributing brochures and sending letters to families residing in various zip codes and to students enrolled in various schools in ethnically diverse neighborhoods. We were unable to determine the ascertainment rate because we used brochures and because the letters were sent to many families who did not have a 10th grader. To insure maximal response, we paid families $25 to hear a description of the project in their home. Of the families that heard the description, 85.5% expressed interest and carried through with the first assessment.

Designed to be relatively representative of the ethnicity of the United States, the sample consisted of 11.5% African American, 12.5% Hispanic, 1.5% Native American, 1% Asian American, 4% biracial, and 69.5% White, non Hispanics. With regard to family structure, 57.5% were residing with 2 biological or adoptive parents, 11.5% were residing with a biological or adoptive parent and a step parent or partner, and the remaining 31% were residing with a single parent or relative. With regard to socioeconomic status, 55.4% of their mothers had a college degree, as would be expected from an ethnically representative sample from this particular Metropolitan area. The sample was of average intelligence and comparable to national norms on multiple measures of substance use, internalizing and externalizing symptomatology (see Furman et al., 2009).

With regard to sexual orientation, 88.6% said they were heterosexual/straight, whereas the remaining 11.4% said they were bisexual, gay, lesbian, or questioning. We chose to retain the sexual minorities in the sample both to be inclusive and because the majority of them reported that they were either bisexual or questioning their sexual identity.

Procedure

For the purposes of the current study data were drawn from the third wave of data collection, when the vast majority was in the twelfth grade. This wave of data collection was chosen to insure that the participants had substantial opportunities to date and have romantic relationships. Only 1 male out of the original 200 participants did not complete this assessment wave. At that time the mean age was 17.93 years (SD = .51). Eighty-eight percent of the participants said they had dated a partner for at least one month by this wave; 76 percent had such a relationship in the last year.

Adolescents participated in a session in which they were interviewed about romantic relationships and completed questionnaires. The mother figure residing with the participant and a close friend nominated by the participant were also asked to complete questionnaires about the participant (Mothers $N = 174$; Friends: $N = 159$). Written informed consent or assent was obtained from the participant, mother, friend, and friends' parents. The participant, mother, and friend were compensated financially for completing the questionnaires.

Measures

Romantic involvement
The Romantic Interview (Furman, 2001) and Dating History Questionnaire (Furman & Wehner, 1992) were used to assess adolescents' romantic involvement. In the beginning of their interview about their romantic relationships, participants were asked about each romantic relationship that occurred in the last 12 months and that had lasted for at least one month. Specifically, they were asked when it occurred, how long it lasted, whether it was on and off, and whether they were in love. We calculated the number of these relationships, average relationship length, proportion of relationships that were on and off, and proportion of partners with whom they were in love. On the Dating History Questionnaire participants were asked to rate on a five-point Likert scale whether they typically casually date or have long relationships.

Principal components analyses were conducted on these five items. In accordance with factor interpretability, two factors were extracted using an oblimin rotation. The first factor was labeled Serious Romantic Involvement and consisted of three items: a) Average relationship length, b) Proportion of partners with whom they were in love, and c) Having serious (vs. casual) relationships. The second factor was labeled Casual Romantic Involvement and had two variables that primarily loaded on it: a) Number of relationships, and b) Proportion of relationships that were on and off. The two factors were minimally correlated ($r = .16$, $p < .05$), suggesting they are relatively independent dimensions of dating experience.

Romantic support and negative interactions
Participants completed the Network of Relationships Inventory: Behavioral Systems Version (NRI), to assess their perceptions of their most important romantic relationship in the last year (Furman & Buhrmester, 2009). The NRI examined five features of social support related to attachment, caregiving, and affiliation: (a) participant seeks safe haven; (b) participant seeks secure base; (c) participant provides safe haven; (d) participant provides secure base; and (e) companionship. Three features of negative interactions were assessed: (a) conflict, (b) antagonism, and (c) criticism. Each component was measured by three questions rated on a five-point scale. Principal components analyses with oblimin rotation revealed that

a two factor solution was found to be the most theoretically interpretable. The five support scales loaded on one factor and the three negative interaction scales loaded on a second factor. Accordingly, romantic support and negative interaction factors were derived by averaging the scales loading on the factor (alpha = .96 on each scale).

Relational styles

Three versions of the Behavioral Systems Questionnaire (BSQ) were used to assess cognitive representations or relational styles for friendships, romantic relationships, and relationships with parents (Furman & Wehner, 1999). The concept of relational styles is conceptually similar to attachment romantic styles, but we believe that such styles are better characterized as representations of intimacy and closeness than as representations of an attachment bond. Most adolescent relationships do not meet the traditional criteria for an attachment bond (Cassidy, 2008) in that the bonds are not necessarily persistent and adolescents do not necessarily seek security and comfort from that person. Accordingly, relational styles for parents and friends were not just assessed by asking participants about attachment, but also about caregiving of the other and affiliation in that particular type of relationship. For romantic relationships we also asked their approach to sexual behavior. For each type of relationship, secure, dismissing, and preoccupied styles were each assessed with between 9 and 12 five-point Likert items. For example, a dismissing item referring to attachment was "I rarely turn to (my friends/parents/romantic partners) when upset"; a preoccupied item referring to caregiving was "I get too wrapped up in my (friends'/parents'/romantic partners') worries"; a secure item referring to affiliation was "My (friends/parents/romantic partners) and I make frequent efforts to see and talk with each other."

Separate principal component analyses were conducted on the items regarding the parent, friend, and romantic partner. A two factor solution was found to be the most theoretically interpretable and consistent in the analyses of each of the three relationship styles. The two factors were: a) an avoidant style on which the items on the dismissing scales loaded positively, and the items on the secure scale loaded negatively, and b) an anxious dimension on which all the items on the preoccupied scale loaded. These dimensions resemble the avoidance and anxiety dimensions commonly found in adult attachment research (Brennan, Clark, & Shaver, 1998; Simpson, Rholes, & Nelligan, 1992). Accordingly, we used two relational style scores for each of the three types of relationships: 1) an avoidant score, which was computed by reverse scoring the secure items and averaging them together with the dismissing items; 2) an anxious style score, which was the average of the preoccupied items. Internal consistencies were all satisfactory (Cronbach alphas ranged from .83 to .94).

Romantic life satisfaction

On the Dating History Questionnaire participants were asked to rate their satisfaction with their romantic or dating life on a five-point scale.

Romantic appeal and physical appearance

Participants, friends and mothers completed abbreviated forms of Harter's (1988) Adolescent Self-Perception Profile (ASPP) about the participant. For the purposes of the present study, we examined the romantic appeal and physical appearance domains of the ASPP. Romantic appeal assesses adolescents' confidence in attaining the romantic relationships they would like to have (e.g., "Some teens usually don't go out with people they would really like to date BUT other teens do go out with people they really want to date"). The physical appearance scale assesses satisfaction with appearance (e.g., "Some teens wish their physical appearance was different BUT other teens like their physical appearance the way it is"). Each scale consisted of five items which were rated on a four-point structured alternative format (M alpha = .84, range = .76–.90). The three reporters' perceptions of romantic appeal were substantially related to each other (participant–mother $r = .59$; participant–friend $r = .41$, friend–mother $r = .50$, all $ps < .001$), as were their perceptions of physical appearance (participant–mother $r = .47$; participant–friend $r = .42$, friend–mother $r = .45$, all $ps < .001$) Accordingly, we derived composite measures of the two variables by standardizing and averaging the different reporters' perceptions.

Friends' romantic involvement

Participants were asked what proportion of their friends had: a) begun dating, b) were dating casually, c) had a boy/girlfriend, d) had a serious relationship, e) were planning to get engaged, married, or live with someone, and f) were engaged, married, or living with someone. All questions were asked on a five-point Likert scale. A measure of the degree of friends' involvement was derived by averaging the items. Internal consistency was satisfactory (alpha = .81).

Results

Preliminary data analyses

All variables were examined to determine if the assumptions of univariate analyses were met (Behrens, 1997). All variables had acceptable levels of skew and kurtosis. Outliers were adjusted to fall 1.5 times the interquartile range below the 25th percentile or above the 75th percentile (e.g., to the whiskers in Tukey's (1977) boxplot).

Prediction of romantic involvement, romantic cognitions, and relationship quality

The aim of the study was to examine how friends' romantic involvement, physical appearance, and styles regarding relationships with parents and friends were associated with features at three different romantic levels. Table 1 presents the pattern of relations among the primary variables. Another way to address this aim would be to conduct a series of multiple regressions predicting the different features of romantic experience. However, an average of 6.8% of the scores on the primary variables were missing; an average of 4.6% of the data were missing because a participant was not administered a measure because she/he had not had the requisite romantic experience; for example, those who had not had a romantic relationship in the last year did not complete measures of relationship quality. The exclusion of participants with incomplete data by either pairwise or listwise deletion results in significant biases in parameter estimates (Schafer & Graham, 2002). Therefore, rather than conducting traditional multiple regression analyses and excluding participants, we conducted a series of structural equation models in AMOS 5.0 (Arbuckle, 2003). Like traditional multiple regression analyses, the structural equation models allow the examination of the associations between a set of predictor variables and an outcome, but yield more accurate estimates of parameters by using full information maximum likelihood procedures to allow the inclusion of participants with missing data.

Each of these models included paths from each of the eight predictor variables (gender, age, physical appearance, friends' romantic involvement, avoidant and anxious styles regarding parents, avoidant and anxious styles regarding friends) to one of the eight variables being predicted (i.e. casual involvement, serious involvement, romantic relationship support, negative romantic interactions, avoidant romantic styles, anxious romantic styles, romantic life satisfaction, and romantic appeal). The different predictors were allowed to covary with each other. The seven other variables that were neither predictors nor the variable being predicted in a particular model were included as auxiliary variables (Graham, 2003). The auxiliary variables were allowed to covary with all the other variables and themselves. The inclusion of such auxiliary variables enhances the estimation of missing data without compromising the substantive aspects of the model. Like traditional multiple regressions, the relevant statistics in the model are the magnitude and significance of the path coefficients and the amount of variance accounted for in the outcome variables. We compared the amount of variance accounted for by a model with the 6 predictors, gender, and age to the amount of variance accounted for by a model in which only gender and age were predictors, and all other variables were treated as auxiliary variables. The difference in the amount of variance accounted for is analogous to examining the change in R^2 after a set of variables have been added to the equation in a second step. Model fit indices are not reported as the models are just identified and thus fit the data perfectly.

Romantic involvement

Table 1 presents the zero-order correlations with casual involvement. Friends' romantic involvement and physical appearance were positively correlated with casual romantic involvement, whereas more avoidant styles regarding friendship were negatively correlated with casual romantic involvement. Table 2 presents the standardized betas pertaining to the prediction of casual involvement. In the SEM analysis, gender and age did not account for a significant proportion of the variance in casual romantic involvement, $R^2 = .03$, $p = .051$ (See Table 2). However, the addition of the set of six predictors accounted for a significant increase in the proportion of variance accounted for in casual romantic involvement, $\Delta R^2 = .07$, $p = .03$. As hypothesized, friends' romantic involvement provided a significant unique contribution to the prediction of casual involvement; adolescents with more romantically involved friends were more seriously involved.

Age, friends' romantic involvement and physical appearance were positively correlated with the degree of serious romantic involvement (Table 1). In the SEM analysis (Table 2), gender and age accounted for a significant proportion of

Table 1
Correlations among primary study variables.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Gender															
2. Age	−.07														
3. Friend Rom Involve	.10	.19**													
4. Physical appearance	−.04	.05	.10												
5. Parent avoidance	−.29**	.09	−.06	−.27**											
6. Parent anxious	−.06	.04	−.01	−.23**	.07										
7. Friend avoidant	−.30**	.10	−.11	.07	.31**	.20**									
8. Friend anxious	−.08	.09	.05	.28**	.23**	.45**	.20**								
9. Casual involve	.10	.13⁺	.20**	.15*	−.06	−.14⁺	−.16*	−.06							
10. Serious involve	.12⁺	.25**	.21**	.23**	−.06	−.04	−.06	−.03	.16*						
11. Rom. avoidance	−.28**	−.07	−.01	−.07	.23**	.24**	−.56**	.27**	−.08	−.26**					
12. Rom. anxious	−.13⁺	.09	.01	−.21**	.27**	−.28**	.19*	−.61**	.07	−.06	.34**				
13. Rom. support	.18*	.03	.00	.12	−.28**	.06	−.17*	−.15⁺	−.10	.36**	−.50**	−.21*			
14. Neg. Rom. Intxn	−.07	.03	.10	.14	−.04	.00	.03	.14	−.08	.28**	.10	.21*	.51**		
15. Rom. satisfaction	.02	.02	.00	.27**	−.02	.04	−.08	−.15*	.06	.39**	−.26**	−.24**	.51**	−.08	
16. Rom. appeal	.15*	.06	.18*	.55**	−.17*	−.03	−.19*	−.21**	.31**	.42**	−.26**	−.22**	.39**	.03	.43**

Note. A positive correlation with gender indicates girls had higher scores. Rom . = Romantic, Involve = Involvement, Neg. Rom. Intxn = Negative Romantic Interactions. ⁺$p < .10$; *$p < .05$; **$p < .01$.

Table 2

Structural equation model predictors of romantic involvement, romantic cognitions and relationship qualities.

	Casual involve	Serious involve	Romantic avoidance	Romantic anxious	Romantic support	Neg. Rom. intxn	Romantic satisfaction	Romantic appeal
	β	β	β	β	β	β	β	β
Step one	$\Delta R^2=.03$	$\Delta R^2=.08^{**}$	$\Delta R^2=.08^{**}$	$\Delta R^2=.03$	$\Delta R^2=.06^{**}$	$\Delta R^2=.01$	$\Delta R^2=.00$	$\Delta R^2=.03$
Gender	.11	.14*	−.28**	−.11	.24**	−.08	.03	.15*
Age	.14$^+$	.26**	−.09	.12	.07	.04	.02	.08
Step two	$\Delta R^2=.07^{**}$	$\Delta R^2=.07^{*}$	$\Delta R^2=.27^{**}$	$\Delta R^2=.37^{**}$	$\Delta R^2=.10^{**}$	$\Delta R^2=.06^{+}$	$\Delta R^2=.11^{*}$	$\Delta R^2=.34^{**}$
Gender	.08	.16*	−.12$^+$	−.02	.14$^+$	−.10	.05	.14*
Age	.10	.24**	−.05	.08	.03	−.01	.02	.03
Friend Rom. Inv.	.15*	.14*	.03	.04	.00	.11	−.03	.11$^+$
Physical appearance	.14$^+$	.23**	−.03	−.04	.12	.14	.29**	.54**
Parent avoidance	.04	.07	−.01	.14*	−.19*	−.06	.12	.08
Parent anxious	−.13$^+$	−.04	.07	−.01	.13	−.09	.13	.07
Friend avoidance	−.09	.01	.48**	.00	−.14$^+$	−.04	−.08	−.12$^+$
Friend anxious	.03	.00	.11	.57**	−.07	.19*	−.15$^+$	−.11
Overall R^2	.10**	.15**	.35**	.40**	.16**	.07$^+$	.11**	.37**

Note. Table presents R^2 and standardized regression weights in the structural equation models. Neg. Rom Intxn = Negative Romantic Interaction. Friend Rom. Inv. = Friend Romantic Involvement. $^+p < .10$, $^*p < .05$, $^{**}p < .01$.

variance, $R^2 = .08$, $p < .001$; older participants and girls reported more serious involvement. The addition of the set of six predictors provided a significant increment in the amount of variance accounted for, $\Delta R^2 = .07$, $p = .02$. As hypothesized, friends' romantic involvement and physical appearance provided significant unique contributions to the prediction of serious involvement. Those who had friends who were more romantically involved and those with more positive perceptions of their physical appearance were more seriously involved romantically.

Cognitive styles

As shown in Table 1, avoidant and anxious styles regarding both parents and friends were positively correlated with avoidant romantic styles. Boys had more avoidant romantic styles than girls did. As shown in Table 2, gender and age accounted for a significant proportion of variance, $R^2 = .08$, $p < .001$. The addition of the set of six predictors accounted for a significant increase in the proportion of variance accounted for, $\Delta R^2 = .27$, $p < .001$; avoidant styles regarding friendship provided a unique contribution. As hypothesized, more avoidant styles regarding friendships were associated with more avoidant romantic styles.

Anxious and avoidant styles regarding both parents and friends were positively correlated with anxious romantic styles. Anxious romantic styles were also negatively related to physical appearance. In the first step of the SEM analysis, gender and age did not account for a significant proportion of variance, $R^2 = .03$, $p = .051$. The addition of the six predictors accounted for a significant increment in the proportion of variance accounted for, $\Delta R^2 = .37$, $p < .001$. As expected, anxious styles with friends and avoidant styles with parents made significant contributions to the prediction of anxious romantic styles. More anxious styles with friends and and more avoidant styles with parents were associated with more anxious romantic styles.

Romantic relationship quality

As shown in Table 1, avoidant style scores regarding both parents and friends were negatively correlated with romantic support. Girls also reported more support than boys did. As shown in Table 2, gender and age accounted for a significant proportion of variance in the SEM analysis, $R^2 = .06$, $p = .002$. The addition of the set of six predictors in the regression accounted for a significant increase in the proportion of variance accounted for, $\Delta R^2 = .10$, $p = .002$. As hypothesized, avoidant styles regarding relationships with parents provided a unique contribution in predicting romantic support; adolescents with more avoidant styles with parents reported less support in their romantic relationships.

None of the variables were significantly correlated with negative romantic interactions. Gender and age did not account for a significant proportion of variance in negative interactions, $R^2 = .01$, $p = .38$. Anxious style regarding friendships provided a unique contribution to the prediction of negative romantic interactions, but this relation is not interpreted subsequently because contrary to hypotheses, the overall addition of the set of six predictors did not provide a significant increment in the proportion of variance accounted for, $\Delta R^2 = .06$, $p = .06$.

Satisfaction and romantic appeal

As shown in Table 1, physical appearance was positively correlated with romantic life satisfaction, whereas anxious styles regarding friendships were negatively correlated with romantic life satisfaction. As shown in Table 2, gender and age did not account for a significant proportion of variance, $R^2 = .00$, $p = .91$. However, the addition of the six predictors provided a significant increment in the proportion of variance accounted for, $\Delta R^2 = .11$, $p = .001$. Only physical appearance provided a unique contribution to the prediction of satisfaction. Adolescents were more satisfied with their romantic lives when their physical appearance was seen more positively.

Finally, friends' romantic involvement and physical appearance were positively correlated with romantic appeal, whereas avoidant styles regarding parents and friends and anxious styles regarding friends were negatively related. Girls were

reported to have greater levels of romantic appeal (Table 1). Gender and age did not account for a significant proportion of variance in the model, $R^2 = .03$, $p = .051$ (Table 2). The addition of the set of six variables accounted for a significant increment in the proportion of variance accounted for, $\Delta R^2 = .34$, $p < .001$. Physical appearance contributed uniquely to the prediction of romantic appeal. Adolescents were seen as more romantically appealing when their physical appearance was perceived more positively.

Prediction of romantic life satisfaction and romantic appeal from features of romantic experience

The finding that only physical appearance provided a unique contribution to the predictions of satisfaction and romantic appeal was unanticipated. An examination of the pattern of correlations in Table 1 revealed that a number of different features of romantic experience were associated with satisfaction and appeal. Accordingly, we conducted follow-up analyses to determine how the different levels of romantic experience were associated with romantic life satisfaction and romantic appeal. Once again, we conducted structural equation modeling. This model included paths from gender and age and the six romantic features (i.e. casual romantic involvement, serious romantic involvement, romantic support, negative romantic interactions, avoidant and anxious romantic styles) to either romantic life satisfaction or romantic appeal. The other variables in the study were included as auxiliary variables and were allowed to covary with all the other variables and themselves.

As shown in Table 1, serious romantic involvement and romantic support were positively correlated with romantic life satisfaction; anxious and avoidant romantic styles were inversely related to satisfaction. As shown in Table 3, the first step with gender and age did not account for a significant proportion of variance in romantic life satisfaction, $R^2 = .00$, $p = .91$. However, the addition of the set of six variables accounted for a significant increment in the proportion of variance accounted for, $\Delta R^2 = .40$, $p < .001$. Gender, serious romantic involvement, anxious romantic style, romantic support, and negative interactions all contributed uniquely to the prediction of satisfaction; males and more seriously involved adolescents reported higher levels of satisfaction. Adolescents reporting more anxious romantic styles and more negative romantic interactions experienced lower levels of dating satisfaction.

Casual romantic involvement, serious romantic involvement and romantic support were all positively related to romantic appeal, whereas avoidant and anxious romantic styles were negatively related. Female adolescents reported more romantic appeal than males (Table 1). As shown in Table 3, gender and age did not account for a significant proportion of variance in romantic appeal, $R^2 = .02$, $p = .14$. The addition of the six variables accounted for a significant increment in the proportion of variance accounted for, $\Delta R^2 = .33$, $p < .001$. Casual romantic involvement, serious romantic involvement, and romantic support all were positively related and provided unique contributions in the prediction of romantic appeal.

Discussion

The present findings provided general support for Furman and Wehner's (1994) hypothesis that the predictors of romantic involvement would differ from the predictors of romantic relationship quality and styles. Consistent with prior work on adolescents and young adults (Feingold, 1990; Furman, Ho, & Low, 2007; Langlois et al., 2000), perceptions of physical appearance were positively associated with more casual and serious romantic involvement. As expected, adolescents' perceptions of their friends' romantic involvement were also associated with more casual and serious romantic involvement. Friends' normative romantic involvement was positively related and provided a unique contribution to the prediction of casual involvement; both physical appearance and friends' normative romantic involvement were positively related and provided unique contributions to the prediction of serious involvement. As expected, however, relational styles regarding relationships with either parents or friends were not very related to romantic involvement. Only one of the eight zero-order

Table 3
Romantic features predicting cognitions (Satisfaction and romantic appeal).

	Romantic satisfaction	Romantic appeal
	β	β
Step one	$\Delta R^2 = .00$	$\Delta R^2 = .02$
Gender	.03	.15*
Age	.02	.08
Step two	$\Delta R^2 = .40$**	$\Delta R^2 = .33$**
Gender	−.13*	.01
Age	−.06	−.03
Casual involvement	.01	.24**
Serious involvement	.29**	.25**
Romantic avoidance	.12	.04
Romantic anxious	−.13*	−.11
Romantic support	.51**	.35**
Neg. Rom. interact.	−.17*	.01
Overall R^2	.40**	.35**

Note. Table presents R^2 and standardized regression weights in the structural equation models. Neg. Rom. Intxn. = Negative Romantic Interaction. $^+p < .10$, $^*p < .05$, $^{**}p < .01$.

correlations was significant, and none of them provided unique contribution in the prediction of casual or serious involvement. Taken together, the findings are consistent with the idea that the degree of romantic involvement is primarily associated with peer prestige, norms and other peer contextual variables.

The pattern of relations with relationship quality and romantic styles were quite different in nature. As hypothesized, physical appearance and perceptions of friends' romantic involvement were not very related to romantic relationship qualities or romantic styles. Only one of the eight correlations was significant, and neither variable provided a unique contribution in the prediction of romantic relationship qualities or styles. As expected, however, relational styles regarding parents and friends were related to romantic relationship qualities and romantic styles. In particular, ten of the sixteen correlations were significant and every romantic quality and style variable was uniquely predicted by at least one of the four parent and friend style variables. Thus, this pattern of results is consistent with Furman and Wehner's (1994) idea that experiences in other close relationships are linked to experiences in romantic relationships, whenever these relationships do occur. The similarity in styles would be predicted as expectations regarding one relationship would be expected to affect expectations in a subsequent relationship.

The number of associations with romantic relationship qualities and styles were relatively similar for styles regarding relationships with parents and friends. However, corresponding styles of relationships with friends and romantic partners were significantly more correlated than corresponding styles of relationships with parents and romantic partners (avoidant $r = .54$ vs. .21; anxious $r = .61$ vs. .28, $ps < .05$). The stronger links between friends and romantic partners is consistent with prior work with other adolescent samples (Furman, 1999; Furman et al., 2002; Furman & Wehner, 1994). Experiences in relationships with parents may influence experiences in friendships, but because friendships are peer relationships, these experiences and the representations that stem from them may be the mechanism that influences representations of romantic relationships, or at least adolescent romantic relationships (Furman et al., 2002); this idea, however, requires testing with longitudinal data.

As hypothesized, styles regarding relationships with friends and parents were associated with support in romantic relationships as well as romantic styles. Specifically, more avoidant styles regarding relationships with friends and parents were associated with less romantic support. Contrary to hypotheses, none of the styles were significantly related to negative interactions, however, and the set of variables did not provide a significant increment in the prediction of negative interactions in romantic relationships. Other research has also found the quality of relationships with parents and friends are associated with negative interactions in adolescent and young adults' romantic relationships (Connolly et al., 2000; Donnellan, Larsen-Rife, & Conger, 2005; Furman & Shomaker, 2008; Overbeek, Stattin, Vermulst, Ha, & Engels, 2007), suggesting mechanisms other than styles may also lead to links among these relationships. For example, conflict that is modeled in one relationship may carry over to other relationships. Finally, as expected, anxious romantic styles and serious involvement were both associated with perceptions of more negative romantic interactions; such findings suggests that romantic experiences themselves may be stronger predictors of negative interactions than experiences in other relationships; the interaction between the adolescent and partner's characteristics may also be an important predictor of negative interactions.

Romantic appeal and satisfaction

Finally, we examined what variables were associated with romantic life satisfaction and romantic appeal. Physical appearance was positively related to both. Such findings are consistent with the literature showing that physical attractiveness is associated with romantic popularity (Feingold, 1990; Langlois et al., 2000), and contributes to the literature by demonstrating that the physically attractive adolescents are also more satisfied with their romantic life.

Contrary to expectations, neither friends' romantic involvement nor styles regarding relationships with parents or friends were associated with romantic satisfaction or romantic appeal. On the other hand, features at the different levels of romantic experience were associated with romantic satisfaction and appeal. In fact, all of the features except negative romantic interactions were correlated with romantic appeal, and all except negative interactions and causal involvement were correlated with satisfaction. This pattern of results suggests that global perceptions of romantic experience, such as satisfaction or romantic appeal, may be more linked to specific aspects of romantic experience than to more distal variables, such as cognitions regarding other close relationships or friends' romantic behavior.

An examination of the pattern of correlations also revealed that serious involvement and support are only moderately related to each other. In fact, the correlation between serious involvement and support is very similar to the correlation between serious involvement and negative interactions ($r = .36$ vs. $r = .28$). Being in love or having a long relationship as an adolescent is no assurance that a relationship is particularly supportive. Serious involvement tends to include more negative interaction, perhaps because more difficult issues arise in more serious relationships or because partners feel more comfortable having such interactions. However, seriousness, as well as support, provided unique contributions to the prediction of satisfaction and romantic appeal, suggesting both are important features.

Interestingly, casual romantic involvement was positively related to romantic appeal, but not romantic life satisfaction. Those who are romantically appealing may be able to have more relationships, but it appears that shorter, more casual relationships have little influence on levels of dating satisfaction at this age.

Limitations and future directions

In an effort to capture the peer context, the present study examined more features of romantic experience than is usually done, but the picture is inevitably incomplete. Neither partner characteristics nor relationship content were examined, and

only a small number of cognitive and emotional processes were considered. Additionally, we relied solely on the participants' own reports of their own romantic experiences. In many respects, the participant is the only person who can report on their full range of dating experience, but it would be valuable to include their romantic partners' perception of the quality of their romantic relationship, particularly as the degree of agreement between adolescent and partner is not very high (Zimmer-Gembeck & Ducat, in this volume).

Additionally, the assessments of romantic involvement and relationship quality only incorporated experiences during the last year. We chose to only examine the last year so that the measures were consistently contemporaneous or reflected current perceptions. It would be important, however, to examine whether and how one's cumulative experiences may be associated with other facets of romantic experience or other relevant variables. For example, the total number of relationships (or perhaps number of serious relationships) may be more predictive of romantic appeal than the number of relationships in a particular year. The consideration of such cumulative experiences seems particularly important as adolescents begin dating at different ages, and the degree of involvement may vary from year to year.

The dimension of serious romantic involvement particularly warrants further attention. Although one might have expected serious and casual involvement to be opposite ends of the same dimension, they were only moderately related to each other; some adolescents may be low on both dimensions, and some may be high on both as scores reflected involvement over the course of the last year and some may have had both casual and serious relationships during that time. Person-centered analyses examining the various configurations of casual and serious dating would be a promising direction to pursue. Additionally, serious romantic involvement was also relatively distinct from support, suggesting more research is needed to determine the factors predictive of indices of seriousness, such as relationship length and being in love.

Perceptions of friends' normative romantic involvement were positively associated with the two indices of romantic involvement. Such perceptions, however, are likely to overestimate the degree of similarity between their friends' behavior and their own. Moreover, any association could stem from whom they choose to be friends with (selection effects) or the influence of their friends on their behavior (socialization effects). Longitudinal work using objective indices of similarity is necessary to understand the nature of this association. The present measure was also calculated by averaging the proportion of friends who engaged in each of a number of different romantic activities, ranging from beginning to date to becoming engaged. In the future, it would be interesting to determine if adolescents who primarily casually date associate with friends who casually date, whereas those with more serious romantic relationships associate with those who also have serious relationships.

Only one wave of data was examined in the present study. Longitudinal data will be required to unravel potential causal or mediational effects among the data. Such longitudinal data are also essential for understanding the developmental course of the different features of romantic experience. It seems very possible that some features may be more central and important during different developmental periods. For example, the indices of involvement may be more relevant in early adolescence, whereas relationship qualities and styles may become increasingly important as romantic relationships become more intimate and longer lasting.

In conclusion, the present findings underscore the importance of simultaneously examining multiple levels of romantic experiences. If we only examine features at one level of romantic experience, we will not obtain a complete picture of the links that exist and the potential processes that may occur. Similarly, an examination of a single level would make it difficult to identify variables that may be directly linked to each other, and what variables may be related because of their covariation with other variables. In the present study our examination of multiple levels of romantic experience provided us an opportunity to identify differences in the pattern of associations that exist with appearance, friends' romantic involvement, and relational styles with parents and friends. In effect, the examination of multiple levels allowed us to show that features predicting the amount of romantic involvement are very different from those that predict the qualitative nature of the romantic experiences that occur.

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