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Journal of Social and Personal Relationships 2001; 18; 583

DOI: 10.1177/0265407501185002

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ABSTRACT

The purpose of this study was to determine if a narrative technique based on the Adult Attachment Interview could be used for studying working models of friendships. A Friendship Interview was developed and administered to a sample of 68 high school seniors. Theoretically coherent factors reflecting friendship experiences and working models were obtained. Ratings of dyadic support from friends were related to secure working models, and inversely related to dismissing working models. Ratings of friend controlling–self dependent behavior and self controlling–friend dependent behavior were related to preoccupied working models. Ratings of experiences in friendships were related to self-perceptions of friendships. Working models were related to self-perceptions of relational styles and attachment styles.

KEY WORDS: adolescence • attachment • working models

In the early 1980s, Main and her colleagues developed the Adult Attachment Interview (AAI), a semi-structured measure based on narratives of parent–child relationships (George, Kaplan, & Main, 1985; Main & Goldwyn, 1998). Such narratives are coded to assess *working models* of attachment, which are sets of rules and expectations for the organization of information relevant to attachment. These models not only affect cognition, memory, and attention, but they also affect behavior and the appraisal of experiences (Main, Kaplan, & Cassidy, 1985). (Main (1999) replaced the term ‘working models’ with ‘states of mind with regard to attachment,’ but for reasons discussed subsequently, the original term is used here.)

Working models (states of mind) are assessed in the AAI by a detailed coding of a written transcript of the narrative. In particular, coders rate different facets of the coherence of the narrative, such as idealization, insistence on

Appreciation is expressed to Mary Frances Porter for her coordination of the data collection, and Heather Bouchey, Laura Shaffer, and Valerie Simon for their coding of the interviews. Preparation of this article was supported by Grant 50106 from the National Institute of Mental Health (W. Furman, P.I.). Thanks to Mary Main and Judith Crowell for permitting me to adapt their interviews and coding systems to these relationships. Correspondence concerning this article should be addressed to Wyndol Furman at the Department of Psychology, University of Denver, Denver, CO 80208–0204. [E-mail: wfurman@nova.psy.du.edu].

Journal of Social and Personal Relationships Copyright © 2001 SAGE Publications (London, Thousand Oaks, CA and New Delhi), Vol. 18(5): 583–602. [0265–4075 (200110) 18:5; 019354]

a lack of memory, and involving anger (see Hesse, 1999; Main & Goldwyn 1998). On the basis of these ratings, the coder typically classifies the working model of attachment into one of three categories: (1) Secure, those who value the relationships and find them influential; (2) Dismissing, those who attempt to limit the influence of the relationships; and (3) Preoccupied, those who are confused, angry, or preoccupied with the experiences.

Additionally, coders rate the inferred childhood *experiences* the person had with each parental figure. One of Main's critical contributions was to distinguish between the past experiences individuals have had and their current working models. Some individuals have had very rejecting, neglecting, or overinvolved parents, but manage to develop a secure state of mind with regard to these figures.

It is also important to distinguish these internalized, partially unconscious working models from overt *styles* or perceptions of relationships that can be assessed by self-report measures (Furman & Wehner, 1994). Individuals are not necessarily aware of the underlying models that may be influencing their thoughts, feelings, or actions. Some may develop defensive mechanisms to protect themselves against undesired feelings or perceptions. For example, some may overtly describe their relationships in very positive, idealized terms as a way of denying their untoward experiences.

Narrative approaches, such as the AAI, are able to circumvent the problem of defensive responding because the coding focuses on the *coherence* of the answers. Coding is not so much based on what an individual *says* but on what is *shown*. That is, one not only considers the abstract descriptions of the relationships, but also the specific memories or incidents in the relationship to determine if the individual has idealized the relationship or if the discourse concerning the relationship is coherent.

Since its development, the AAI has proven to be a valuable tool for examining a wide range of issues (see Hesse, 1999). One interesting question is whether such an approach could be used for examining narratives of other relationships. Crowell and Owens (1996) developed an interview and coding system for assessing premarital or marital relationships (see also Silver & Cohn, 1992). Unlike relationships with parents, most couple relationships are reciprocal relationships in which each person seeks out the other as an attachment figure and in turn provides caregiving for them. Accordingly, the Current Relationship Interview (CRI) was designed to assess caregiving as well as attachment processes. Although the content of the CRI differs somewhat from the AAI, Crowell and Owens essentially use the AAI's system for coding coherence of the interview, and categorize working models as secure, dismissing, and preoccupied. In the research to date with these interviews, working models of marital relationships have been found to be related to models of relationships with parents (Owens et al., 1995) and to patterns of interaction with their partners (Gao & Waters, 1998).

Bartholomew (1989) also developed an interview for examining representations of adults' peer relationships, which asks about romantic and non-romantic relationships. Her approach has some similarities to the other ones, but the specific coding systems and classification systems differ.

Importantly, her classification system does not consistently distinguish between working models and experiences as do the other investigators.

These studies suggest that a narrative method based on the AAI can be used with other relationships, but, to date, most of the work has focused on marital or romantic relationships. Individuals would, however, be expected to have working models of other close relationships, such as friendships, and thus, this approach could potentially be appropriate for examining these relationships.

An extension to friendships would not only be methodologically important, but it would also have interesting theoretical implications because of the differences among the relationships. Specifically, relationships with parents and with marital partners are both conceptualized as attachment relationships (Hazan & Shaver, 1987), but most friendships are not thought to be (Cassidy, 1999). Individuals may seek proximity to their friends and some may turn to them as a safe haven, but most friends do not seem to serve as secure bases from which to explore the world, nor do individuals usually protest when separated involuntarily from their friends.

On the other hand, friends are important affiliative figures. Like attachment, affiliation has been conceptualized as a behavioral system (Furman, 1998). Specifically, humans are biologically predisposed to affiliate with known others, as such interactions provided protection, cooperative food sharing, and opportunities for social play. Because they are relatively egalitarian in nature, friendships provide particularly rich opportunities for cooperation, mutualism, and reciprocal altruism.

The differences among various relationships suggest that the content of the working models of different relationships would vary somewhat. Although the specific content of models of different relationships may differ a bit, I hypothesized that the structure of models of friendships would be similar to models of attachment relationships. Thus, I expected that models of friendship would vary in terms of their coherence and the values and expectations regarding friendships. As a consequence, I expected that I could use a system similar to the AAI to code coherence, and could categorize working models of friendship as secure, dismissing, and preoccupied (Furman & Simon, 1999; Furman & Wehner, 1994). That is, such a system could be used to capture differences in the representations of not only the attachment system but also in representations of the other behavioral systems operating in a given relationship (e.g., caregiving and affiliation).

For example, those with dismissing models of friendships would be expected to have little interest in caregiving and little investment in a relationship, as well as not wanting to turn to friends at times of distress. They would value autonomy highly and try to discount the importance of their experiences and friendship, perhaps by idealizing, derogating, or claiming not to remember much about these friendships. Those with preoccupied models would be expected not only to find it difficult to feel comforted by friends when distressed, but would also be overly concerned about their friends' problems (i.e., compulsive caregiving), and would overly invest in relationships in a self-sacrificing manner. They would be absorbed

in these relationships, and often angry, passive, or vague in their thought processes. Finally, those with secure working models of friendships not only want to seek proximity to their friends when they are distressed, but they value the caregiving role and emphasize mutuality and cooperation. In some instances, their friendships may not provide a safe haven, or opportunities for caregiving or mutuality, but they would value those features as well as both intimacy and autonomy. Importantly, they would be able to talk coherently and collaboratively about their friendships, regardless of whether they have been satisfactory or not.

The purpose of this study was to examine whether a narrative approach based on the AAI could be applied to friendships. One specific aim was to determine whether narratives of friendship could be reliably classified into the categories used by attachment researchers. Another aim was to develop a set of variables for characterizing experiences with friends. Additionally, the study examined the links between these working models and self-report measures of relational styles; because of the conceptual distinctions discussed previously, modest relations were expected. Finally, the study examined the relations between friendship experiences as assessed by the interview, and self-perceptions of friendship qualities.

Method

Participants

The participants were 68 high school seniors, who resided in a large Western US metropolitan city. Half were female and half were male. They ranged in age from 16 to 19 years. The sample was ethnically and socioeconomically diverse, with 63% Caucasian, 16% African-American, 13% Hispanic, and 3% Asian-American.

Procedure

The participants were part of a large project on adolescent romantic relationships. They were recruited by mailing letters to high school seniors enrolled in two school districts. Interested adolescents participated in three or four sessions at the laboratory, one of which was an interview about their friendships. Questionnaires were completed between sessions. Participants were paid \$60 to \$80 for completing all phases of the larger project. Interviewers were all female, as adolescents of both sexes are more willing to disclose to women than to men (Leaper, 1994).

Friendship Interview

The Friendship Interview was designed to assess working models of friendships and experiences of interviewees with their closest friends. The interview can also be used for assessing romantic relationships, although a separate session is required. Just as with the AAI, the Friendship Interview consisted of a series of semi-structured questions and typically took between 45 minutes and an hour and a half to administer. The interview focused on their one to three most important friendships in recent years, although the participants were also provided opportunities to discuss other friendships or to share their experiences

with friends in general. Multiple relationships were examined as it was expected that working models of friendships would be affected by experiences in a number of different relationships.

The Friendship Interview was derived from the AAI, and many questions were similar in intent and content to those of the AAI. For example, participants were asked to select five adjectives to describe particular friendships, tell what they do when they are upset, indicate whether they have ever felt rejected, and tell what they have gained from their relationships. Some modifications were made to take into account the differences between parent-child relationships and peer relationships. For example, we asked what they did when they were upset, but we did not ask what they did when they were hurt or ill, as adolescents do not commonly turn to peers for support in these particular instances.

The AAI focused on attachment, but the Friendship Interview assessed the caregiving and affiliative features of friendship as well. Thus, the interview included questions about how the participant responded when a friend was upset as well as what the participant did when s/he was upset.

Coding of interviews

The interviews were audiotaped and subsequently transcribed verbatim. The coding system was based on the systems used in the AAI (Main & Goldwyn, 1998) and the Current Relationship Interview (CRI), a system for coding narratives of one's spouse (Crowell & Owens, 1996). The specific scales used for rating experiences in particular friendships are depicted in Table 1. Separate

TABLE 1
Component structure of Friendship Interview scales

Experience scales	Support	Friend controlling	Self controlling
Friend's behavior toward participant			
1. Loving	.86		
2. Communication	.89		
3. Provides Support for Participant	.89		
4. Seeks Support from Participant	.75		
5. Rejection	-.33		
6. Involving		.57	
7. Control		.88	
8. Dependency			.80
Participant's behavior toward friend			
9. Communication	.91		
10. Provides Support for Friend	.79		
11. Seeks Support from Friend	.88		
12. Satisfaction with Friend	.67	-.40	
13. Involving			.58
14. Control			.87
15. Dependency		.77	
Relationship features			
16. Mutuality	.85		
17. Conflict Resolution	.62		
18. Conflict Frequency		.63	.35

ratings for each of the most important friendships were made. One noteworthy feature of these systems is that the ratings are not based on global impressions, but instead the coders are expected to indicate the specific passages that are the bases of their ratings. As in the scoring of the AAI, coders had the option of indicating that they could not rate a scale, or could only provide a provisional rating.

Working models (states of minds) were primarily assessed using Main and Goldwyn's (1998) scales. Additionally, Crowell and Owens's valuing of intimacy and valuing of autonomy scales were included; these two scales were not part of Main and Goldwyn's original system, but statements regarding intimacy and autonomy were considered in determining AAI classifications, and, thus, the inclusion of such scales seems consistent with the original conceptualization. Table 2 contains a list of all scales, and Table 3 presents examples of narratives illustrating various key scales. As can be seen from these tables, the scales focus on different aspects of the coherence of the interview. As in the coding of the AAI, these scale scores serve as the primary basis for deriving an overall classification of the working model (see Hesse (1999) for a description of the links between the specific indices of coherence and the various classifications).

Transcripts are typically classified as: (a) secure, (b) dismissing, or (c) preoccupied. Less commonly, a transcript could be classified as: (a) unresolved/disorganized because of abusive behavior, a friend's death, or the dissolution of the relationship, or (b) cannot classify, because it fails to meet the criteria for placement in the other categories. Each of the latter two categories only occurred 1% of the time. Accordingly, this article focuses on the three primary categories.

The features of the classifications took into account the nature of friendships among adolescents and young adults in this culture. Thus, secure individuals were expected to value such affiliative features as cooperation, mutuality, and shared interests; they would also be expected to value support-seeking and support-providing, but they were not expected to emphasize attachment features, such as distress at separation or seeking assistance when physically hurt

TABLE 2
Working Model (state of mind) scales

Working Model Scales	Dismissing-Secure	Preoccupied
1. Idealization	.76	
2. Insistence on Lack of Recall	.76	
3. Involved/Involving Anger		.83
4. Dismissing Derogation		.42
5. Passivity of Thought Processes		.78
6. Unresolved Response		.60
7. Valuing of Autonomy	.37	-.56
8. Valuing of Intimacy	-.79	
9. Metacognition	-.30	
10. Coherence of Transcript	-.91	-.41

Note. The Unresolved Response score was the highest score on three scales reflecting lack of resolution to a friends' abusive behavior, a friend's death, or the dissolution of a friendship. Coherence of Mind was also scored, but was not included in the principal components analysis because of its very high correlation with coherence of transcript. Fear of loss was scored, but had minimal variance.

TABLE 3
Illustrations of various Working Model scales

Idealization

PARTICIPANT: I guess, no matter what it is we tell each other stuff. So. I don't know. I guess we can communicate real good. So.

INTERVIEWER: Again, is there an example that shows that?

PARTICIPANT: An example. I don't know, like if I get a. Like one quarter or something I got a bad grade or something. You know when you get a bad grade you don't want to tell nobody. So you know, but I told him and he kind of laughed at me and stuff, but it was better than telling somebody else cause I don't know. Cause I just feel better telling, telling him stuff, I guess.

Involving Anger

PARTICIPANT: There were these girls, they were so mean and as I was going by she spit her gum out and she spit it into my hair and I cursed at her and [friend's name] heard me and she was just looking over at me just shaking her head '[Participant's name] you know you're not supposed to cuss' and it just drove me up the wall I was like 'She spit gum in my hair what am I supposed to do? If I beat her up, you're going to tell me I shouldn't do it. If I cursed her out, you're gonna say I shouldn't do it, so what difference does it make? She spit gum in my hair.' You know so that was one time when it just errrrrrr irked me. I just couldn't believe that she said, '[Interviewee's Name] you shouldn't' Oh man please I'll just spit gum in your hair.

Passivity (Vagueness in Discourse)

PARTICIPANT: I'd probably say my friend was abusive. You know it was to a point that I lost my confidence in what I could do. So I wouldn't say anything to him about it. I wouldn't say blah, blah, blah, blah, blah, blah.

Valuing of Autonomy

When we're apart. It's like – like I don't feel lonely or like I need to talk to em right away. Like it's good to be apart from them sometimes.

Valuing of Intimacy

[The relationship is] especially intimate in that um, we share a lot of information that you wouldn't normally share about the opposite sex, um . . . Um, she's very important to me, she, and and. It's just, it's just a espec, it's especially nice to have someone like that in life.

Note. These examples illustrate the kinds of statements that are scored on these scales. It is important to emphasize, however, that the interpretation of any statement is dependent on context, and the scale score is based on all the examples in the transcript.

as these features are not characteristic of most friendships. Table 4 presents illustrative sections of narratives.

Finally, the coders used 9-point Likert scales to indicate how prototypically secure, dismissing, and preoccupied the transcript was (1 = *Has none of the features of the type*, 9 = *Prototypic instance*). These ratings were based on the same system as the classifications, but provided continuous ratings of each of the three, rather than a single categorization of the best fitting type (see Griffin & Bartholomew, 1994, for the merits of the different approaches).

TABLE 4
Representative narratives of secure, dismissing, and preoccupied participants

INTERVIEWER: Is there any particular thing which you feel you learned above all from your experiences with your friends? I'm thinking here of something you feel you might have gained from the kind of experiences you've had.

SECURE PARTICIPANT: Mm. I've gained a lot of self-respect. I've gained uh, a lot of pride. A lot of feelings that you know I mean, these are my friends and no matter what I really did, they would still you know love me. And still want to be my friend. So. That's probably what I've gained. I've gained the fact that you know, I can be real honest with them. And be like, 'That really bothers me' Or, 'No I really don't like that.' I don't have to be clones of them to be their friend. That's nice.

DISMISSING PARTICIPANT: Above all? I think just to like lighten up a lot more. I don't know like. I think through [name of former friend] I just took the friendship too seriously and the rest of them I kind of lightened up. I mean. Just thankful that I was just friends with them in the first place you know. Wouldn't nothing that was really expected I knew that. I mean I learned that friendships wasn't all about expecting things from one another. It's just about you know having some good times you know.

PREOCCUPIED PARTICIPANT: Um - probably the main one would be trust, um, you learn to trust somebody before, or actually I should say let them learn to trust you before you're able to trust them because if they don't trust you then why bother trusting them because they're gonna say 'ok well this person doesn't trust me so I can do whatever. I can hurt em, I can steal their boyfriend or whatever because they don't trust me and they wouldn't even know.' And then, so I just, I mean I like to build trust in a relationship before I build anything, before I tell em anything that means anything to me, before I tell them anything that goes on in my life, I wanna build that trust and I want them to build that trust out of me also so make it equally in both ways.

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 friend narratives. Pairs of coders independently coded 24% of the transcripts, and inter-rater agreement was found to be satisfactory ($\kappa = .90$). The reliability of the prototypic ratings and experience factors was also satisfactory (mean $r = .79$). The set of reliability transcripts was randomly selected and did not include an unresolved or cannot classify example. Thus, I do not know how reliably these particular categories could be coded. The coders had, however, coded examples of these categories at the Adult Attachment Workshop, and had successfully coded multiple examples of unresolved AAI transcripts as part of Main and Hesse's reliability test.

Questionnaire Measures

Network of Relationships Inventory (NRI). The NRI assessed perceptions of the features of various close relationships, including a same-sex friendship (Furman & Buhrmester, 1985). Participants rated how much each feature occurred in each relationship, using 5-point Likert scales. For example, one item was 'How much free time do you spend with each of these persons?' The measure contained 18 items assessing different provisions of support, including companionship, reliable alliance, enhancement of worth, instrumental help, affection, and intimacy, all of which have been found to load on a single Support factor (Furman, 1996). Additionally, the measure contained six conflict and

annoyance items, which load on a second Negative Interaction factor. Cronbach's alphas for the factors exceeded .89. Perceptions of friendships have been found to be related to friends' perceptions and patterns of interaction (see Furman, 1996, for a summary of validation evidence).

Behavioral Systems Questionnaire (BSQ). The BSQ was used to measure conscious secure, preoccupied, and dismissing relational styles for friends. Secure, dismissing, and preoccupied relational styles were each assessed with 15–20 5-point Likert items. The participants were asked how much they agreed or disagreed with various statements about different approaches to attachment, caregiving, and affiliation in friendships. For example, one of the secure items was 'It's easy for me to turn to my friends when I have a problem', whereas one of the preoccupied items was 'I am often still bothered after talking to my friends'. Cronbach's alphas for the three style scores were all greater than .85 (see Furman, 1996; Furman & Simon, 1999, for further information).

Attachment style. On Hazan and Shaver's (1987) attachment measure, participants read three paragraphs describing secure, avoidant, and anxious-ambivalent attachment styles and rated how characteristic of themselves each is; then they chose the most characteristic one. This measure was adapted for the present purposes by asking them about behavior toward friends, rather than toward 'others', 'a partner', or 'people' as the original measure did.

Marlowe-Crowne. The Marlowe-Crowne Social Desirability Scale was administered to assess responding in a socially desirable manner (Crowne & Marlowe, 1960).

Results

Characteristics of the Friendship Interview

Classifications. The distribution of the classification of the interviews was as follows: (a) secure: 46%, (b) dismissing: 36%, (c) preoccupied: 16%, (d) unresolved/disorganized: 1% , and (e) cannot classify: 1% . In contrast, the distribution on the friend version of Hazan and Shaver's (1987) attachment vignettes was: (a) secure: 73%, (b) avoidant (dismissing): 14%, and (c) anxious-ambivalent (preoccupied): 14%.

As shown in Table 5, the mean scores of the continuous prototypic ratings

TABLE 5
Means (and standard deviations) of primary interview variables

Experience scales	
Dyadic support factor	4.88 (1.20)
Friend controlling-self dependent factor	1.46 (.50)
Self controlling-friend dependent factor	1.42 (.68)
Prototypic ratings	
Secure	4.66 (2.51)
Dismissing	4.24 (2.35)
Preoccupied	2.63 (2.02)

were consistent with the categorical distributions. Because of the psychometrically appealing features of continuous variables, the prototypic ratings were used in most analyses.

Friendship experiences. Principal component analyses with oblique rotations were conducted on the experience scales for the specific friendships. Examination of the loadings suggested that a three-factor solution was the most interpretable. The three factors accounted for 63% of the variance and were labeled: (1) Dyadic Support, (b) Friend Controlling–Self Dependent, and (c) Self Controlling–Friend Dependent. Scale loadings of the specific scales are presented in Table 1. Factor scores were calculated by averaging the scores on the variables that had loadings of .35 or greater on a single factor.

The interviewers encouraged participants to pick two close friends to describe in detail, and 66% did; 18% selected three, and 16% only one. In a few instances, the interviewer added a friend who seemed either important or problematic. Not surprisingly, the friendships that were chosen tended to be long-lasting ones ($Mdn = 36$ months). Almost all were friends currently (89%) and of the same sex (87%).

Analyses were conducted to examine the correlations between experiences in their two friendships (or for those who mentioned three, the first two they discussed). Dyadic support in the two relationships was highly correlated, $r = .61$, $p < .01$, but the self controlling–friend dependent scores were only marginally related, $r = .23$, $p < .10$, and the friend controlling–self dependent score were not significantly related, $r = .15$. Interestingly, friend controlling–self dependent scores for the first friendship were related to self controlling–friend dependent scores in the second friendship, $r = .30$, $p < .05$, and, conversely, friend controlling–self dependent scores in the second tended to be related to self controlling–friend dependent scores in the first, $r = .25$, $p < .10$.

An examination of specific scales suggests that the links were stronger for the variables reflecting the participant's behaviors than the friend's behavior. Specifically, the scores on the participant's communication, support-providing, and support-seeking scales in one friendship were significantly correlated with the corresponding scales in the second friendship, $M r = .64$; on the other hand, the corresponding scales for the two friends' behavior were less strongly related, $M r = .33$. Similarly, the self controlling, involving, and dependency scores in the first friendship were typically correlated with these three scores in the second friendship, $M r = .28$, six of nine were significantly correlated; on the other hand, the first friend's scores on the three variables were not as strongly related to the scores on the three for the second friend, $M r = .11$, three of nine were significantly correlated.

Working models. Principal component analyses with oblique rotations were also conducted on the working model (state of mind) scales. A two-factor solution was found to be most interpretable. The two factors accounted for 48% and were labeled: (1) Dismissing–Secure Model, and (2) Preoccupied Model. The loadings of the different scales are shown in Table 2. Factor scores were calculated by averaging scores on the scales that uniquely loaded on the factor. Not surprisingly, the Dismissing–Secure factor was substantially related to the dismissing prototype variable, $r = .81$, $p < .01$, and inversely related to the secure prototype score, $r = -.75$, $p < .01$. Similarly, the Preoccupied factor was highly related to the preoccupied prototype variable, $r = .85$, $p < .01$, and inversely

related to the secure prototype score, $r = -.51, p < .01$. Because the prototype scores were intended to be composites of these working model scales and yet retain the secure–dismissing distinction, they were used in subsequent analyses. Supplementary analyses using the two factors yielded similar results to those presented here.

For most of the working model variables, only a single rating across relationships was calculated, but for idealization, insistence on lack of recall, dismissing derogation, and involving/involved anger, separate scores for each relationship were also calculated. Highly significant correlations across relationships were found in all cases, all $r_s > .58, p_s < .01$.

Experiences and working models. To examine the links between experiences and working models, the experience score ratings were averaged across friendships and then correlated with the prototype ratings. As shown in Table 6, mean dyadic support in friendships was positively correlated with security, and inversely correlated with dismissing scores. The two control factors were related to the preoccupied ratings. Friend controlling–self dependent scores were also inversely related to secure and dismissing scores.

Next, a series of regression analyses were conducted in which each of the three experiences scales was entered to predict the prototypic ratings. The results were consistent with the correlational analyses. The sets of three experience scales accounted for large portions of the variance for all prototypes, secure $R^2 = .64$, dismissing $R^2 = .46$, preoccupied $R^2 = .60$, all $p_s < .001$. All of the variables that were significantly correlated with a prototypic rating were significant predictors in the regression equations, even when they were entered last.

To illustrate the links between the experiences and working models, friendships were divided into those that had scores of 5 or above on dyadic support and those with scores of below 5. This point was selected as it is the midpoint on the original rating scales, and seemed to reflect a moderately supportive friendship. For example, the midpoints of the rating scales were characterized in terms such as ‘neither unloving nor actively loving,’ ‘willing to provide support,’ and ‘moderate communication.’ The distributions of supportive and non-supportive friendships for each of the working model classifications were then calculated, and are presented in Table 7. The distributions of the types of friendships differed significantly as a function of classification, $\chi^2(4, N = 67) = 192.21, p < .001$. All of the friendships were supportive for 23 of those with a secure working model (74%); seven of those with secure models had both supportive and non-supportive friendships (23%), and one had only

TABLE 6
Correlations between experiences with friends and prototype ratings

	Prototype ratings		
	Secure	Dismissing	Preoccupied
Dyadic warmth	.77**	-.70**	.01
Friend controlling–self dependent	-.27*	-.27	.71**
Self controlling–friend dependent	-.11	.23	.56**

* $p < .05$; ** $p < .01$.

TABLE 7
Friendship experiences of secure, dismissing, and preoccupied individuals

	Classification		
	Secure	Dismissing	Preoccupied
All supportive	23	1	1
Mixed	7	3	6
All non-supportive	1	21	4

Note. Table depicts the numbers of secure, dismissing, and preoccupied individuals whose friendships were all coded as supportive, the numbers who had some supportive and some non-supportive, and the numbers who had all non-supportive.

non-supportive ones (3%). For the dismissing individuals, one had only supportive relationships (4%), three had both supportive and non-supportive ones (12%), and 21 had only non-supportive relationships (84%). For the preoccupied individuals, one had only supportive relationships (9%), six had both supportive and non-supportive friendships (55%), and four had only non-supportive friendships (36%).

Sex, ethnicity, and SES differences. *t*-tests revealed that adolescent girls were rated higher than the boys on the friend controlling-self dependent variable, $M = 1.63$, $SD = .82$ versus $M = 1.29$, $SD = .52$, $t(66) = 2.03$, $p < .05$; similarly, girls had higher self controlling-friend dependent scores, $M = 1.64$, $SD = .86$ versus $M = 1.21$, $SD = .30$, $t(66) = 2.75$. The girls also had higher preoccupied prototype ratings, $M = 3.24$, $SD = 2.14$ versus $M = 2.03$, $SD = 1.72$, $t(66) = 2.56$, $p < .05$, and tended to score lower on the dismissing ratings, $M = 3.72$, $SD = 2.16$ versus $M = 4.75$, $SD = 2.45$, $t(66) = 1.84$, $p < .10$. No significant differences were observed on dyadic support, or the secure prototype ratings.

A similar set of analyses of variance revealed no significant differences between participants who were ethnic minorities and those who were Euro-Americans. The experience factors and prototype scores were also unrelated to mothers' and fathers' level of education. It is possible that differences would be obtained if specific ethnic minority groups were examined, but the nature of the sample precluded such analyses.

Construct validity

The interview ratings of friendship experiences were correlated with self-perceptions of friendships on the Network of Relationships Inventory. Dyadic support was correlated with perceptions of support, $r = .49$, $p < .01$. Friend controlling-self dependent scores were correlated with perceptions of negative interactions, $r = .38$, $p < .01$, and self controlling-friend dependent scores tended to be related to negative interactions, $r = .23$, $p < .10$.

Next, the prototypic working ratings were correlated with the style scores on the Behavioral Systems Questionnaire and the friend version of Hazan and Shaver's (1987) measure. The secure prototype rating was significantly correlated with its corresponding BSQ relational style and the Hazan and Shaver (1987) attachment style, $r_s = .28$ and $.27$, respectively, $p_s < .05$. Similarly, the dismissing prototype rating was correlated with the corresponding BSQ and Hazan

and Shaver's style scores, $r_s = .30$ and $.33$, respectively, $p_s < .05$. The preoccupied prototype ratings only tended to be related to the corresponding ratings on the BSQ and Hazan and Shaver's (1987) measure, $r = .22$, $p < .10$ and $r = .19$, *ns*, respectively.

Finally, none of the prototypic ratings or friend scores was related to the Marlowe–Crowne measure of social desirability, all $r_s < .15$.

Discussion

The narratives of friendships obtained from the interviews appear to be a promising method for assessing the characteristics and working models of friendships. The scales are psychometrically sound and theoretically coherent. The correlations with other measures provided construct validity for the measure.

Friendship experiences

With regard to friendship experiences, the coders were able to code most aspects of most friendships. The coders indicated that they were unable to rate a scale less than 2% of the time. Similarly, the coders were relatively confident with the majority of their ratings, providing provisional ratings in parentheses in less than 8% of the cases. Such provisional ratings primarily occurred when the relevant information was limited in nature, could be interpreted in different ways, or was hard to rate because the narrative was generally not very coherent or believable. The proportions of 'cannot rate's and parenthesized ratings are comparable to the proportions the coders have used in rating the experience scales of the AAI (< 3% and < 9%, respectively).

The factor structure of the experience scales was also theoretically coherent. Analyses of self-report measures of friendship have commonly yielded two factors: warmth/support and negative interactions (Furman, 1996). These two factors were evident in a two-factor solution of the interview experience ratings, but, with a three-factor solution, the negative interaction factor separated into two complementary factors in which one person was controlling or overinvolving and the other was dependent. To date, most self-report measures have not included questions about the controlling, involving, or dependent behavior of each person, and thus may not have been able to distinguish the two control factors. When the self-report measures have asked about overt differences in power or control, a power factor or factors still do not emerge, principally because the items are not commonly endorsed. On the other hand, when a measure has included items that assess subtle differences in power, a power factor has been obtained. Similarly, the current narratives did not include many direct statements about being controlling or dependent; instead, such patterns were indirectly alluded to. For example, very few participants acknowledged that they were controlling, but a number said that their friends

needed a lot of advice from them or that their friends had said that they were controlling. One appealing feature of a narrative approach is that it may be sensitive to indirect indices of patterns of behavior that are not readily endorsed.

Substantively, the factor analyses suggest that subtle power differences or power issues occur in friendships, even if friendships are conceived of as egalitarian relationships. The conflict frequency scale loaded on both of the controlling–dependency factors, suggesting that issues of power and investment may be a source of significant conflict. Conversely, disagreements or conflicts may lead someone to become demanding or controlling. High scores on the controlling–dependency factors were also associated with the preoccupied ratings. Preoccupied individuals are characterized as being confused, angry, ambivalent, or anxious about their relationships. Such concerns may be manifested in their being demanding or dependent or wanting more involvement from their friends.

Interestingly, the involving scale loaded in the same direction as the control scale on the Friendship Interview, but, in factor analyses of a similar Romantic Interview administered to the same sample, the involving scale loaded in the opposite direction. That is, it loaded in the same direction as the dependency scale. Perhaps efforts to heighten the other's involvement are more direct and active in friendships, whereas they may be more passive and dependent in romantic relationships. Friends may be comfortable explicitly saying that they want more time and attention, whereas romantic partners may be more reluctant to state their desires for closeness or to make efforts to control the other because of the tenuous nature of most adolescent romantic relationships.

The narratives obtained from the interview provided a means of characterizing both the similarities and the differences in an individual's friendships. Ratings of dyadic support in the two friendships were relatively highly related. Further analyses revealed that this primarily reflected consistency in the participant's behavior in the two relationships, although some consistency was found in the two friends' behaviors as well. This finding seems quite plausible, as one would expect the same person to act more similarly in two relationships than would two people in different relationships. However, the descriptions of the two friendships were both provided by the adolescents; the individuals may overestimate the degree of similarity in the two relationships, especially in their own behavior. In future research, it would be important to gather information from the friends as well as the adolescents. Alternatively, one may want to examine patterns of interaction in the different relationships.

Equally interesting was the nature of the consistency in the controlling, involving, and dependent behavior. Participants who were controlling or wanting greater involvement from the friend in one relationship were somewhat likely to behave in the same manner in the other friendship, but they were just as likely to be dependent. Apparently, issues of control and involvement may carry across different friendships, but the specific manifestations of the issues may vary.

Working models

The factor structure of the working model scales was also theoretically consistent, as Main and Goldwyn (1998) had intended to include multiple indices of dismissing and preoccupied models. Unexpectedly, the dismissing derogation scale loaded on the Preoccupied factor. Almost all the scores were relatively low, however, and seemed to reflect adolescent sarcasm, rather than the cold dismissing derogation characteristic of higher scores on the scale. The sex differences in the preoccupied and dismissing prototypes are consistent with past work on adolescents' working models of parents (Kobak, Cole, Ferenz-Gillies, Fleming, & Gamble, 1993).

The concept of working models has been primarily used to describe representations of attachment relationships, but the present study suggests that it may prove valuable in describing representations of friendships, even though such relationships do not seem to meet all the criteria of a primary attachment relationship. Not only did Main and Goldwyn's (1998) working model scales prove useful in assessing representations, but the classification system seems applicable as well. The coders could reliably code the transcripts into the classifications, and the prototypic ratings derived from them were meaningfully related to other variables. The AAI focuses on the attachment system, but the Friendship Interview also included questions about caregiving and affiliation. These questions not only proved useful in assessing experiences in friendships, but also were helpful in assessing working models. That is, these questions, as well as the questions concerning attachment, elicited comments that were scored on the working model scales or that were indicative of a secure or insecure model. The coders' clear impression was that the comments concerning the different relational features were consistent with each other. Thus, it appears that working models are expectations regarding intimacy and closeness, which may be enacted in terms of attachment, caregiving, or affiliation.

One important question is whether working models of relationships or models of attachment should be conceptualized as a unified construct or not. For some purposes, one may want to examine representations of particular relationships, but the high correspondence of the working model scales for the two friendships suggests that it is reasonable to aggregate across the relationships and examine working models of friendships. Similarly, working models of fathers and mothers have been found to be highly related, even when assessed in different interviews administered months apart (Furman & Simon, in preparation). One advantage of assessing multiple instances of a particular kind of relationship is that one can obtain more extensive information about working models, and can compare different relationships to help interpret the narrative. For example, one would be more certain that a participant is highly autonomous if she emphasized self-sufficiency in several relationships than if she had only described wanting some independence in one friendship in which the other was very controlling or dependent.

Working models of different kinds of relationships seem more distinct than models of the same kind of relationships. As described in another

article from this project (Furman, Simon, Shaffer, & Bouchey, in press), working models of friendship were found to be moderately related to working models of romantic relationships and working models of relationships with parents (mean $r = .43$). Similarly, Owens et al. (1995) report a moderate level of convergence in models of parents and current romantic partners. Taken together, the findings discussed in this section suggest that one may be able to combine across different behavioral systems in a relationship and even across different relationships of a particular kind, but one may often want to distinguish among working models of different types of relationships. At the same time, the moderate correlations across different types of relationships suggest that an overall model of close relationships also exists. In effect, the findings are consistent with a hierarchical model of relationship representations wherein one has an overall model of close relationships, models of kinds of close relationships, and models of particular relationships (Collins & Read, 1994; Furman & Simon, 1999).

Thus, the set of findings lead to a somewhat different interpretation of what is measured in interviews such as the present one or the AAI. In particular, it suggests that they assess representations of intimacy and closeness in particular types of relationships. Hesse (1999) observes that the AAI is intended to measure 'state of mind with respect to attachment.' The AAI does only focus on attachment representations, but if the present conceptualization is correct, such representations of attachment may be part of a broader set of representations of intimacy and closeness in these relationships. Additionally, the AAI and the other interview measures may partially tap overall representations of attachment across relationships, but it appears that such representations are also somewhat specific to particular types of relationships. Taken together, these considerations would suggest that the AAI assesses a subset of representations of intimacy and closeness in relationships with parental figures.

The difference in conceptualization is not a major one when parental figures are the primary or only attachment figures, and when the attachment system is the most important aspect of these relationships. The difference becomes more significant when individuals develop other attachment relationships, such as with romantic partners, and then may have different states of mind (working models) regarding the different types of attachment relationships. Similarly, the difference becomes more significant when caregiving and affiliation become more salient in relationships with parents, as might happen as individuals and their parents grow older. If this reinterpretation is correct, the states of minds (working models) with respect to relationships with parents during adulthood would then center on representations of caregiving and affiliation, as well as attachment (see Furman et al., in press, for further discussion).

Given these considerations, the term 'working models of parent-child relationships' seems preferable to the term 'states of mind with respect to attachment.' Alternatively, the term 'states of mind with respect to parent-child relationships' would capture the important idea that the

representations are somewhat specific to types of relationships and incorporate representations of multiple aspects of closeness and intimacy.

Working models and experiences

Working models and experiences were found to be related. Secure prototype scores were positively related to dyadic support scores, and dismissing prototype scores were inversely related to support scores. The preoccupied ratings were linked with the controlling–dependent variables. At the same time, working models and experiences were not identical. Most of the secure individuals selected a pair of relatively supportive friendships as their closest friendships, but about 26% of them described a relatively non-supportive friendship. Despite these non-supportive relationships, these individuals still had secure models, perhaps because their other friendships or other relationships were supportive, or perhaps in a few cases because of therapy.

The distinction between experiences and states of minds seems particularly important for assessing adolescents' working models of friendships, as they are often experimenting in these relationships, and many have diverse experiences across relationships. Even those whose closest friendships were all supportive would often mention another friendship that had gone awry or proven to be a 'mistake.' Such anomalies can occur because the selection of friends is strongly influenced by factors other than their working models; thus, a friend's behavior may not be congruent with one's working models. At the same time, working models are expected to play an important role in determining what one learns or fails to learn from a relationship, be it a mistake or not. Thus, secure individuals are expected to learn more from their experiences than insecure ones, who may find themselves repeating the same mistakes.

Construct validity

Many of the results presented here are analyses of the pattern of relations among different features of the Friendship Interview. As such, the results may be influenced by the coders' implicit expectations about the links among the different variables. However, the variables derived from these narratives were also related to the self-report measures. The ratings of dyadic support and the two control factors were related to the adolescents' perceptions of support and conflict. Similarly, the prototypic ratings were related to relational style scores on the BSQ and the attachment styles on the adaptation of the Hazan and Shaver measure.

At the same time, it is important to note that the links between the working model variables and the style measures were only moderate in scope, as others have reported (see Crowell, Fraley, & Shaver, 1999). The level of correspondence is not surprising in that 73% of the participants reported having a secure style, but only 46% of them were classified as having a secure working model. In effect, the findings underscore the distinction between conscious relational styles and internal, partially unconscious, working models. The results also suggest that the Friendship

Interview, like the AAI, can help identify individuals who claim to be secure, but whose internal working models are insecure. By examining the coherence of the narrative, these approaches assess what the person has shown or documented, not just what he or she has said. This distinction is nicely illustrated in the following description from a transcript classified as preoccupied:

We have a good friendship. We, um, it's not, I mean I we're really um, it's. She's not the type of person that like if we don't call each other like in a week or something, like we don't think something is wrong. You know I could go to her anytime for anything. Um, I love her to death. She um I feel so bad. She just she, in my mind she's really fake and um, it's hard for me to. Like all the time I try and talk to her and she'll just. She has more important things to, like talk to someone else you know. She'll just walk away from me and I'm like '[Friend's Name]!' But, um, we've been through a lot together too. She's one of my good friends but not like someone. I mean I could go to her for a lot of things, but not something like my first choice I guess you would say. I mean she listens to me and understands me and I do the same for her, but it's not like we need each other, that type of thing. It I mean we get along really well, basically.

Future directions

Although the links with the self-report measures are encouraging, further validation is needed. As noted previously, it would be important to determine if ratings gleaned from interviews of two friends converge. The links to patterns of interactions also need examination. Additionally, it would be of interest to examine whether associations exist between different narrative approaches. For example, Selman (1980) used an interview approach to examine interpersonal understanding of friendships; his interview does not examine experiences in friendships, but it does examine social cognitive processes that may be linked to the various indices of coherence examined here. Specifically, his construct of interpersonal understanding bears some similarities to Main and Goldwyn's (1998) metacognition scale.

Developmental changes in friendship experiences and working models also should be examined. The interview has been administered to pilot samples of tenth-graders and college students. Our anecdotal impression is that the interview is sensitive to the developmental changes in intimacy that have been found with self-report measures (see Furman & Buhrmester, 1992). The tenth-graders emphasized shared activities and affiliation, whereas the college students commonly talked about support-seeking and support-providing as well as affiliation. It also appeared that one could assess and categorize working models of friendships in the different ages. Versions of the AAI have been used successfully with children as young as 11 years of age, but the precise age limitations of the current interview need to be determined.

One would expect working models to become increasingly richer and

more articulated with age, but it is not as clear whether systematic changes in the security of these models would occur. Theoretically, working models should remain consistent or become more or less secure as a function of the experiences in these relationships, rather than age per se. Thus, some individuals may develop less secure models as a result of adverse experiences with friends, whereas others may develop secure models if they have supportive friendships and are more able to fulfill attachment, caregiving, or affiliative needs in these relationships. Some individuals with insecure models may be less open to change if they consciously or unconsciously recreate the unsatisfying relationships they expect.

Clearly, further work is needed to substantiate the nature of working models of friendships, and to validate the current interviews. The present results are encouraging, however, and suggest that a narrative approach can be used for examining working models of friendships.

REFERENCES

- Bartholomew, K. (1989). *Attachment styles in young adults: Implications for self-concept and interpersonal functioning*. Unpublished doctoral dissertation, Stanford University, Palo Alto, CA.
- Cassidy, J. (1999). The nature of the child's ties. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 3–20). New York: Guilford Press.
- Collins, W. A., & Read, S. J. (1994). Cognitive representations of attachment: The structure and function of working models. In D. Perlman & W. Jones (Eds.), *Advances in personal relationships: Attachment processes in adulthood* (Vol. 4, pp. 29–70). London: Jessica Kingsley.
- Crowell, J., Fraley, R. C., & Shaver, P. R. (1999). Measurement of individual differences in adolescent and adult attachment. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 434–468). New York: Guilford Press.
- Crowell, J., & Owens, G. (1996). *The current relationship interview and scoring system, version 2*. Unpublished document, State University of New York at Stony Brook.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology, 24*, 349–354.
- Furman, W. (1996). The measurement of children and adolescent's perceptions of friendships: Conceptual and methodological issues. In W. M. Bukowski, A. F. Newcomb, & W. W. Hartup (Eds.), *The company they keep: Friendships in childhood and adolescence* (pp. 41–65). Cambridge, MA: Cambridge University Press.
- Furman, W. (1998). Friends and lovers: The role of peer relationships in adolescent romantic relationships. In W. A. Collins & B. Laursen (Eds.), *Relationships as developmental contexts: The 30th Minnesota Symposia on Child Development* (pp. 133–154). Hillsdale, NJ: Erlbaum.
- Furman, W., & Buhrmester, D. (1985). Children's perceptions of the personal relationships in their social networks. *Developmental Psychology, 21*, 1016–1022.
- Furman, W., & Buhrmester, D. (1992). Age and sex differences in perceptions of networks of personal relationships. *Child Development, 63*, 103–115.
- Furman, W., & Simon, V. A. (1999). Cognitive representations of adolescent romantic relationships. In W. Furman, B. B. Brown, & C. Feiring (Eds.), *The development of romantic relationships in adolescence* (pp. 75–97). New York: Cambridge University Press.
- Furman, W., & Simon, V. A. (in preparation). Concordance of working models of mothers and fathers.

- Furman, W., & Wehner, E. A. (1994). Romantic views: Toward a theory of adolescent romantic relationships. In R. Montemayor, G. R. Adams, & G. P. Gullota (Eds.), *Advances in adolescent development: Vol. 6. Relationships during adolescence* (pp. 168–195). Thousand Oaks, CA: Sage.
- Furman, W., Simon, V. A., Shaffer, L., & Bouchey, H. (in press). Adolescents' representations of relationships with parents, friends, and romantic partners. *Child Development*.
- Gao, Y., & Waters, E. (1998, June). *Secure base behavior and attachment security*. Paper presented at the meetings of the International Society for the Study of Personal Relationships, Saratoga Springs, NY.
- George, C., Kaplan, N., & Main, M. (1985). *An adult attachment interview*. Unpublished manuscript, University of California at Berkeley.
- Griffin, D. W., & Bartholomew, K. (1994). The metaphysics of measurement: The case of adult attachment. In K. Bartholomew & D. Perlman (Eds.), *Advances in personal relationships: Vol. 5. Attachment processes in adulthood* (pp. 17–52). London: Jessica Kingsley.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52, 511–524.
- Hesse, E. (1999). The Adult Attachment Interview: Historical and current perspectives. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 395–433). New York: Guilford Press.
- Kobak, R. R., Cole, H. E., Ferenz-Gillies, R., Fleming, W. S., & Gamble, W. (1993). Attachment and emotion regulation during mother–teen problem solving: A control theory analysis. *Child Development*, 64, 231–245.
- Leaper, C. (1994). Exploring the consequences of gender segregation on social relationships. In C. Leaper (Ed.), *Childhood gender segregation: Causes and consequences* (pp. 67–86). San Francisco: Jossey-Bass.
- Main, M. (1999). Attachment theory: Eighteen points with suggestions for future studies. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research and clinical applications* (pp. 845–887). New York: Guilford Press.
- Main, M., & Goldwyn, R. (1998). *Adult attachment scoring and classification system*. Unpublished manuscript, University of California at Berkeley.
- Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. In I. Bretherton & E. Waters (Eds.), *Growing points of attachment theory and research. Monographs of the Society for Research in Child Development*, 50 (Serial No. 209), 66–104.
- Owens, G., Crowell, J. A., Pan, H., Treboux, D., O'Connor, E., & Waters, E. (1995). The prototype hypothesis and the origins of attachment working models: Adult relationships with parents and romantic partners. In E. Waters, B. E. Vaughn, G. Posada, & K. Kondo-Ikemura (Eds.), *Caregiving, cultural, and cognitive perspectives on secure-base behavior and working models. Monographs of the Society for Research in Child Development*, 60 (Serial No. 244), 216–233.
- Selman, R. L. (1980). *The growth of interpersonal understanding: Developmental and clinical analyses*. New York: Academic Press.
- Silver, D. H., & Cohn, D. A. (1992). *Couple attachment interview*. Unpublished instrument, University of California, Berkeley.