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Article *in* Journal of Family Psychology · October 2001

DOI: 10.1037//0893-3200.15.3.371 · Source: PubMed

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Journal of Family Psychology
2001, Vol. 15, No. 3, 371-393

0893-3200/01/$5.00 DOI: 10.1037//0893-3200.15.3.371

Attachment Insecurity and the Distinction Between Unhappy Spouses Who Do and Do Not Divorce

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The hypothesis that attachment insecurity would be associated with remaining in an unhappy marriage was tested. One hundred seventy-two newly married couples participated in a 4-year longitudinal study with multiple assessment points. Hierarchical linear models revealed that compared with spouses in happy marriages and divorced spouses, spouses who were in stable but unhappy marriages showed the highest levels of insecurity initially and over time. Spouses in stable, unhappy marriages also had lower levels of marital satisfaction than divorced spouses and showed relatively high levels of depressive symptoms initially and over time. Results suggest that spouses at risk for stable, unhappy marriages can be identified early and may benefit from interventions that increase the security of spouses' attachment to each other.

Marital discord and dissolution are common, costly problems that have received considerable attention from marital and family researchers. A common assumption in this work is that the factors contributing to discord, whether they be personality traits or communication skills, will eventually also contribute to dissolution. For example, in commenting on the widely adopted social learning model of marital distress, Jacobson and Holtzworth-Munroe (1986, p. 30) noted that "both marital stability and subjective marital satisfaction are seen as determined by the relative frequency of positive and negative behavior exchanges between spouses." Longitudinal research also demonstrates that factors predicting discord also predict dissolution and that dissatisfaction is the most proximal predictor of divorce (Karney & Bradbury, 1995). From these observations, one might conclude that dissatisfaction will eventually lead to divorce for all couples.

However, marital and family researchers know that this is not the case. Some spouses remain married even though they are dissatisfied. Why is this? Some theorists suggest that it is because of moral, cultural, social, or economic constraints that preclude divorce (see Heaton & Albrecht, 1991). For example, if spouses believe divorce is morally wrong or against their religious beliefs, they might be more likely to stay married; alternatively, spouses might stay in a marriage on which they are financially dependent (e.g., Amato & Rogers, 1999; Swenson, 1996; White & Booth, 1991). In addition, spouses might stay in an unhappy marriage if they have young children (e.g., Waite & Lillard, 1991). These factors fit within the investment model of relationships, which states that commitment to a relationship is based on satisfaction, availability of alternatives, and investment

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This research was funded by National Institute of Mental Health (NIMH) Grant MH48674 and by NIMH Research Supplement for Minority Postdoctoral Scholars. We thank Benjamin Karney, Catherine Cohan, Matthew Johnson, Kieran Sullivan, Gregory Miller, Jeb Cozzi, Erika Lawrence, Ron Rogge, and Kathy Eldridge for their assistance in data collection; Benjamin Karney and Craig Colder for their assistance with statistical consultation; and Joseph Veroff for providing us with the Attitudes About Divorce scale.

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(e.g., Rusbult, 1983). For example, spouses might be dissatisfied, but if having children constitutes an investment and if there are no alternatives, then unhappy spouses might stay married. However, although factors such as children or financial constraints might increase the likelihood that a spouse will remain in an unhappy marriage, these factors do not increase the likelihood that a marriage will necessarily be unhappy in the first place.

We suggest that there are interpersonal and intrapersonal factors that decrease the likelihood that spouses will be happy in their marriage while at the same time increasing the likelihood that unhappy spouses will stay married. Our goal is to identify factors that make distressed spouses unlikely to divorce. In this study, we examined one such factor—attachment insecurity—and tested the specific hypothesis that attachment insecurity would be associated with remaining in an unhappy marriage. Our goal should not be confused with that of studying factors that lead to distress only, because many such factors will increase the likelihood of divorce.

Attachment perspectives on romantic love suggest that the love relationship is a primary adult attachment relationship (e.g., Hazan & Shaver, 1987). Attachment functions are transferred to the romantic partner and, as such, the adult romantic relationship follows similar processes and serves similar functions as the childhood attachment relationship (e.g., Fraley & Davis, 1997; Hazan & Shaver, 1994). This does not mean that people should or will have the same attachment style with their adult partner as they had with their parents. Rather, the adult relationship will serve the same secure base functions as the childhood relationship (e.g., Hazan & Shaver, 1994; Waters, 1997). For example, just as children turn to parents in times of stress and monitor their parents' availability in meeting their needs, adults do the same with their romantic partners.

Research confirms that attachment processes operate in adult romantic relationships. For example, attachment representations guide people's expectations about relationships (e.g, Collins, 1996). Attachment representations are associated with people's behaviors with partners when under stress (e.g., Simpson, Rholes, & Nelligan, 1992) and with relationship satisfaction and communication (e.g., Davila, Bradbury, & Fincham, 1998; Davila, Karney, & Bradbury, 1999; Feeney, Noller, & Callan, 1994; Kobak & Hazan, 1991; Senchak & Leonard, 1992). Importantly, insecurity is associated with less marital satisfaction. In fact, they affect one another over time, suggesting that some spouses may be caught in a cycle that maintains chronic feelings of insecurity and dissatisfaction over time (Davila et al., 1999). Our data from the sample used in this study demonstrate this point (Davila et al., 1999).

A number of scholars have theorized that marital distress is grounded in attachment problems. Kobak, Ruckdeschel, and Hazan (1994) suggest that symptoms of marital distress are distorted attachment signals. A spouse's unhappiness is due to underlying attachment-related fears (e.g., fear of abandonment or lack of intimacy). Similarly, proponents of emotionally focused couples therapy (Greenberg & Johnson, 1988) suggest that a distressed couple's problems are grounded in attachment fears, which must be accessed, reprocessed, and modified in order for the couple to develop a secure emotional bond (see Johnson, Hunsley, Greenberg, & Schindler, 1999). Hence, theory and research support the notion that attachment insecurity is related to marital distress.

We suggest that attachment insecurity also can put spouses at risk for staying in an unhappy marriage (see Kirkpatrick & Davis, 1994, for a similar argument pertaining to dating relationships). In particular, concerns about abandonment and love worthiness (what adult attachment researchers refer to as anxiety about abandonment) may do so. Such concerns are at the core of a broader interpersonal style consistent with a preoccupied (or ambivalent) attachment pattern. This pattern is characterized by an overly dependent manner of relating, low self-worth, fear of abandonment, and an excessive desire to gain others' approval (e.g., Bartholomew, 1990). People with this style tend to be excessively focused on relationships and attachment-related information, have a high level of proximity seeking, and be constantly monitoring their attachment figure. They experience high levels of distress when relationships end, and they do not like to be without relation-

ships.[1] It follows that people with these characteristics are likely to attempt to maintain relationships at all costs, even if it means remaining in an unsatisfying one. Hence, unhappily married spouses who are concerned about abandonment and love worthiness may be less likely to divorce than other spouses who do not have such concerns.

Concern about abandonment is not the only indicator of attachment insecurity. Avoidance of intimacy (typically measured by discomfort with closeness and difficulty depending on others) is another. In fact, many scholars consider avoidance of intimacy and anxiety about abandonment to be the two dimensions underlying all attachment styles (e.g., Brennan, Clark, & Shaver, 1998; Shaver & Hazan, 1993). Like anxiety about abandonment, avoidance of intimacy is associated with low levels of marital satisfaction. However, we would not expect avoidance of intimacy to decrease the likelihood of divorce because leaving relationships (e.g., divorcing) may be a good way to avoid intimacy. Only insecurity in the form of anxiety about abandonment should be associated with remaining in an unhappy marriage.

Our predictions are consistent with Drigotas and Rusbult's (1992) dependence model of breakups. This model suggests that the decision to stay in or leave a relationship is based on the level of dependence on the relationship. Dependence is high when people's most important needs cannot be gratified elsewhere. If their dependence needs are being fulfilled, then people will stay in a relationship even if they are dissatisfied. As noted earlier, people who are concerned about abandonment are characterized by dependence in relationships. Fear of being unworthy may lead them to stay in an unhappy relationship out of fear that no one else would ever want or love them. They may believe that it is better to have a relationship, even an unhappy one, than to be without one, and they may feel as though they would be unable to take care of themselves on their own. Hence, the dependence needs of people concerned about abandonment, which are met simply by being in a relationship, should outweigh the poor quality of the relationship and result in the decision to stay. This should not be true for people who avoid intimacy, as their dependence needs are presumably much weaker than those of people who are concerned about abandonment.

We examined the associations among attachment insecurity, marital satisfaction, and marital dissolution in a sample of 172 newlywed couples over the first 4 years of marriage. On the basis of data collected at each time point, spouses were categorized as divorced, married and happy, or married but unhappy and by use of hierarchical linear modeling (HLM), their levels of insecurity over time were compared. Kirkpatrick and Davis (1994) had found that female dating partners conformed to the present predictions but that male dating partners did not. Avoidant men, but not anxious men, had stable relationships. Hence, this possibility was also explored.

We also attempted to rule out three alternate explanations for staying in an unhappy marriage. First, we assessed whether the three groups of spouses differed in attitudes about divorce (divorce attitudes) to determine whether insecure spouses remain in unhappy marriages because they possess attitudes that keep them from divorcing. Second, we examined whether the three groups of spouses differed in whether they had children to determine whether the presence of children is associated with insecure spouses remaining in unhappy marriages. Third, we examined whether the groups differed in neuroticism and self-esteem to rule out the possibility that attachment insecurity is simply an indicator of a broader dysfunctional personality trait or deficiency in self-concept that keeps spouses unhappily married. If the association between

[1] Some readers may wonder how partners with preoccupied attachment styles could be dissatisfied when they are so dependent on their relationship. For example, some might argue that preoccupied partners might be highly motivated to engage in positive illusion processes (e.g., Murray, Holmes, & Griffin, 1996) to work against the loss of their relationship. We suggest that although preoccupied partners are likely to have idealized general representations of their partners and of relationships (e.g., relationships are important and wonderful things to have), they may be aware of and willing to admit specific relationship deficits (e.g., "My partner does not spend as much time with me as I'd like"). Of course, this hypothesis is an empirical question that should be further investigated. For the time being, however, evidence clearly and consistently supports an association between preoccupied attachment patterns and relationship distress.

attachment insecurity and staying in an unhappy marriage holds when each of the alternate constructs is partialled out, then we would have strong support for the hypotheses and for the uniqueness of attachment as a construct.

Finally, research clearly indicates that marital distress has negative consequences for spouses (e.g., Beach & O'Leary, 1993; Christian-Herman, O'Leary, & Avery-Leaf, in press; Kendler et al., 1995). Remaining in an unhappy marriage may be particularly associated with negative outcomes because of the chronicity of the marital distress. We thus compared spouses in the three outcome groups on one measure of individual outcome—depressive symptoms. We chose depressive symptoms because research has shown a consistent bidirectional association between depression and marital functioning (e.g., Davila, Bradbury, Cohan, & Tochluk, 1997; Fincham, Beach, Harold, & Osborne, 1997). If attachment insecurity is associated with spouses being more distressed and, simultaneously, less likely to divorce and if these spouses show higher levels of depressive symptoms than other spouses, then a strong case can be made for specifically targeting people with high levels of attachment insecurity for early intervention.

It is important to note that we are not suggesting that unhappily married spouses would be better off if they divorced. Our goal is not to identify factors that, when changed, would increase the likelihood of divorce. Rather, our goal is to identify factors that, when changed, would allow spouses to have a satisfying marriage whose stability is based on satisfaction rather than insecurity. If it is insecurity that distinguishes unhappy spouses who stay married from unhappy spouses who divorce, then insecurity represents a unique risk factor that is not being addressed presently by many of the most common marital distress prevention and intervention programs, such as the Prevention and Relationship Enhancement Program (see Floyd, Markman, Kelly, Blumberg, & Stanley, 1995) and behavioral or cognitive behavioral marital therapy (e.g., Baucom, Epstein, & Rankin, 1995; Jacobson & Holtzworth-Munroe, 1986; see Greenberg & Johnson, 1988 for an exception).

Method

Participants

Participants were 172 newlywed couples in first marriages who were participating in an ongoing, longitudinal study of marriage.[2] Couples were recruited from marriage licenses filed in Los Angeles County. To be eligible to participate, both spouses had to be over 18 years of age, have at least a 10th grade education, speak English, have no children at entry into the study, and have no immediate plans to move from the area. Wives had to be under 35 years of age, to allow for the possibility that couples could become parents during the course of the larger project. Marriage licenses in Los Angeles County include spouses' address, age, years of education, and number of previous marriages. Couples who were eligible on the basis of this information were sent letters inviting them to participate. Of 3,606 letters that were sent, 637 couples (18%) expressed interest in participating, 41 letters were returned as undeliverable (1%), and 2,928 letters (81%) went unanswered. The 18% response rate is similar to that of other studies recruiting married couples from public records (e.g., 18% by Kurdek, 1991; 17% by Spanier, 1976). Compared with the 2,928 nonrespondents, the 637 respondents were more likely to cohabit premaritally (43% vs. 35%) and to have more years of education (wives: 15.4 vs. 14.5; husbands: 15.2 vs. 14.6), and the wives were older (26.6 years vs. 26.2); respondents also had higher status jobs. Couples who expressed interest in participating were screened further for eligibility with a telephone interview. The first 172 couples who met the eligibility criteria and kept their laboratory appointment formed the sample. All couples were married for less than 6 months when they began the study.

Wives averaged 26.0 years of age (SD = 3.4) and 16.2 years of education (SD = 2.0). Their median annual income ranged from $11,000 to $20,000. Sixty-one percent were Caucasian, 15% were Asian American or Pacific Islander, 5% were African American, 16% were Latina or Chicana, 2% were Middle Eastern, and 1% were identified as "other." Husbands averaged 27.6 years of age (SD = 3.9) and 15.6 years of education (SD = 2.2). Their median annual income ranged from $21,000 to $30,000. Sixty-seven percent were Caucasian, 13% were Asian American or Pacific Islander, 4% were African American, 15% were Latino or Chicano, and 1% were Middle Eastern.

[2] Other articles published from this same data set include Davila et al. (1997), Davila et al. (1998), Davila et al. (1999), Karney et al. (1995), and Sullivan & Bradbury (1997).

Procedure

Spouses participated in an initial in-person laboratory session (T1), seven follow-ups (T2 to T8) each 6 months apart, and a final follow-up approximately 1 year after T8. The T3 follow-up was also an in-person laboratory session. Marital satisfaction and information about children were assessed at T1 to T8. Attachment insecurity and depressive symptoms were assessed at T1 to T5. Divorce attitudes, neuroticism, and self-esteem were assessed at T1. For the T1 laboratory session, measures of attachment insecurity, divorce attitudes, neuroticism, and self-esteem were completed at home prior to the session, during which measures of marital satisfaction and depressive symptoms were completed. For the T3 laboratory session, the measure of attachment security was completed at home prior to the session, during which measures of marital satisfaction and depressive symptoms were completed. Independent completion of home materials was stressed in the instructions to the questionnaires, in a letter that was sent home, and in a telephone call. Couples were paid $75 for participation at each time. For the T2 and T4 to T8 follow-ups, questionnaires were completed at home and mailed in. Independent completion of questionnaires was again stressed in a telephone call and in written instructions. At the final follow-up, spouses provided information, by mail or over the telephone, regarding marital status. Couples were paid $25 for each follow up.

Following are the percentages of couples who participated at each follow up (accounting for the number of divorces accumulated over time): 93% at T2, 95% at T3, 80% at T4, 80% at T5, 78% at T6, 72% at T7, and 79% at T8. One of the advantages of the HLM analyses used to analyze the data is that they use all available data for each participant to estimate trajectories. Hence, participants who do not have data at every time point can be included in the analyses. In our analyses, 163 of the original 172 participants were retained in the analyses.

Measures

Marital satisfaction. The Marital Adjustment Test (MAT; Locke & Wallace, 1959) was used to assess marital satisfaction. The MAT is a widely used 15-item instrument shown to have adequate reliability and to discriminate between nondistressed spouses and spouses with documented marital problems (Locke & Wallace, 1959).

Because one association of interest to us was that between attachment insecurity and divorce and because divorce is a categorical variable, we chose to categorize spouses into three marital outcome groups: divorced, happily married, and unhappily married. All spouses who divorced over the course of the study represented the divorced group (n = 22). To determine whether remaining spouses were happily or unhappily married, we used two rules: (a) spouses must have had MAT scores below the mean at T1, and (b) their MAT scores must have fallen below 100 for more than 50% of the study (e.g., if the spouse participated in eight follow ups, then he or she must have had an MAT below 100 for at least five of the follow-ups). We derived these rules on the basis of our own definitions of the profile of a married/unhappy spouse and by polling three colleagues who are marital researchers.[3] We settled on the most stringent definition generated. An MAT cutoff of 100 was adopted because this is the standard cutoff used by clinicians and researchers to identify distressed couples. On the basis of the above definitions, 13 husbands and 7 wives were categorized as married/unhappy. All married/unhappy spouses had scores below the mean at T1 (average MAT scores in the entire sample are shown in Table 1), and for many this was dramatically so—8 husbands and 5 wives were more than one standard deviation below the mean. Moreover, 7 husbands began their marriage in the dissatisfied range (<100), as did 2 wives. The average MAT score of married/unhappy spouses from T1 to T8 clearly indicated dissatisfaction (M = 83.32, SD = 12.16). The remainder of the spouses (137 husbands and 143 wives) were categorized as married/happy. The married/unhappy group (9% of married husbands and 5% of married wives) is smaller than that in a large national probability sample, in which 11% of married couples were classified as unhappy (Heaton & Albrecht, 1991). However, our sample was relatively healthy compared with other married samples. As such, we may have underestimated the number of distressed married couples in the general population (see Karney et al., 1995). The outcome groups did not differ in demographic variables (age, education, income, and religion).[4]

Adult romantic attachment. The 18-item Revised Adult Attachment Scale (Collins & Read, 1990) was used to assess dimensions of adult romantic attachment. This scale includes three sub-

[3] Three researchers who are T. N. Bradbury's current students or former students now in academic positions were asked to examine the MAT data and identify spouses who were married but chronically unhappy. They were instructed to look for chronic unhappiness, not just unhappiness at one time point. They were also asked to describe the strategy they used to classify people.

[4] Some readers may suggest that the MAT is not a pure measure of marital satisfaction. In order to de-

scales: Close, which measures the extent to which people feel comfortable being close to others; Depend, which measures the extent to which people are comfortable relying on others and believe that others are dependable; and Anxiety, which assessed fears of abandonment and of being unloved. The Anxiety subscale captures the dimension of insecurity that we expected to be associated with being married/unhappy. The Close and Depend subscales tap aspects of avoidance of intimacy. Although many researchers form a composite from the Close and Depend subscales, we chose not to do so because prior analyses of our sample indicated that these items follow different trajectories over time and, as described later, we analyzed group differences for these trajectories. The Revised Adult Attachment Scale has been shown to have adequate reliability and validity (e.g., Collins & Read, 1990). For wives and husbands, respectively, average internal consistencies (alpha coefficients) over the five time points in this study were as follows: Close, .82 and .79; Depend, .82 and .83, and Anxiety, .86 and .82.

termine whether our results generalized to other measures of satisfaction, we did two things. First, we examined the correlations at each time point between MAT scores and scores on the Norton Quality Marriage Index (QMI; Norton, 1983) and a 16-item semantic differential measure of marital satisfaction. For husbands, correlations ranged from .65 to .95 (M = .81). For wives, correlations ranged from .55 to .94 (M = .81). These correlations suggest that all three measures tap a common construct. Note also that Karney and Bradbury (1997) did not find evidence of differential effects of the MAT, Norton QMI, and semantic differential measure in their study of marital satisfaction trajectories. Second, we examined whether spouses would be categorized by the QMI and the semantic differential measure as being in the same marital outcome groups as those based on the MAT. The problem with this examination, however, is that unlike in the MAT, there is no accepted cutoff for marital dissatisfaction in the QMI or the semantic differential measure. So, we adopted the strategy of classifying people as married/unhappy if their mean scores over time in the QMI and the semantic differential measure were more than two standard deviations below the sample mean. Husbands categorized in this way had all been categorized as married/unhappy by the MAT. However, wives' groupings differed. Therefore, the analyses were reconducted with new groupings for wives. The results were parallel to those obtained with the MAT groupings and yielded no new findings or conclusions. Hence, we concluded that our MAT findings are generalizable to other measures of satisfaction.

Depressive symptoms. Depressive symptoms were assessed with the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). The BDI is a widely used 21-item self-report measure that has shown adequate reliability (alpha coefficient consistently exceeds .80) and has been well validated with nonpsychiatric samples (see Beck, Steer, & Garbin, 1988). Participants completed the BDI on the basis of their experiences in the past week.

Attitudes about divorce. Attitudes about divorce were assessed with the nine-item Attitudes About Divorce measure developed by Veroff (1988). The items assess the degree to which respondents agree versus disagree on a nine-point scale with items such as "My religious beliefs would keep me from getting divorced," "Divorce can be a reasonable solution to a troubled marriage (reverse scored)," and "Except in rare cases, couples should stay married no matter what." Scores can range from 9 to 81, and higher scores are indicative of attitudes opposing divorce. Alpha coefficients for this measure were .78 for husbands and .77 for wives.

Information about children. We computed one variable to indicate the presence or absence of children from information provided by couples from T1 to T8.

Neuroticism. Neuroticism was assessed with the Neuroticism subscale of the Eysenck Personality Questionnaire (Eysenck & Eysenck, 1978), a widely used instrument that assesses the extent to which participants experience and express a range of negative affects (e.g., tension, anxiety, and sadness). The Eysenck Personality Questionnaire Neuroticism subscale is a 23-item true–false measure that has adequate internal consistency and test–retest reliability (Eysenck & Eysenck, 1978). Alpha coefficients in this study were .83 for wives and .86 for husbands.

Self-esteem. Self-esteem was assessed with the Rosenberg Self-Esteem Scale (Rosenberg, 1965), a widely used 10-item measure of people's overall feelings of worth and value. Participants made ratings on a four-point scale ranging from 1 (*strongly agree*) to 4 (*strongly disagree*). Alpha coefficients were .86 for wives and .87 for husbands.

Data Analyses

HLM (Bryk & Raudenbush, 1992) was used to analyze the data. HLM typically proceeds in two steps. First, multiple assessments of a variable are used to estimate a trajectory, or growth curve, that describes how each person is changing over time. Second, the parameters summarizing change are treated as dependent variables and can be predicted from other within- or between-subjects variables.

In prior HLM analyses of our sample (Davila et al., 1999), which were designed to examine change in attachment representations during the early years of

Table 1
Means and Standard Deviations for All Variables

Variable	Husbands		Wives	
	M	*SD*	*M*	*SD*
T1 Anxiety	13.44	4.9	13.42	5.2
T2 Anxiety	12.86	4.2	13.03	5.0
T3 Anxiety	12.51	4.6	12.68	5.4
T4 Anxiety	12.21	4.3	12.33	5.0
T5 Anxiety	12.26	4.9	12.30	5.2
T1 Depend	19.21	4.5	20.35	4.6
T2 Depend	19.48	4.7	20.77	4.9
T3 Depend	19.63	4.7	20.92	5.1
T4 Depend	20.29	5.2	21.29	5.3
T5 Depend	19.79	5.3	20.83	5.3
T1 Close	21.88	4.6	23.10	4.7
T2 Close	21.96	4.7	23.00	4.7
T3 Close	21.89	4.4	23.69	4.4
T4 Close	22.00	4.1	23.54	4.9
T5 Close	21.75	4.6	23.33	5.1
T1 satisfaction	126.68	16.9	130.08	16.1
T2 satisfaction	122.81	20.2	126.35	17.7
T3 satisfaction	123.20	20.9	126.20	19.4
T4 satisfaction	118.79	22.6	123.25	20.5
T5 satisfaction	119.97	22.6	122.37	22.0
T6 satisfaction	120.84	20.9	121.64	20.7
T7 satisfaction	118.02	22.6	121.14	21.9
T8 satisfaction	117.47	24.2	120.10	20.9
T1 BDI	3.94	4.0	4.41	4.1
T2 BDI	4.01	4.1	4.07	4.4
T3 BDI	3.83	4.3	4.35	4.3
T4 BDI	3.12	3.4	3.63	3.8
T5 BDI	2.79	3.3	5.03	5.2
T1 Div. Att.	47.98	14.4	45.45	15.1
T1 Neuroticism	6.58	4.9	9.29	4.9
T1 Self-Esteem	34.35	4.9	33.94	4.9

Note. Anxiety = subscale of the Revised Adult Attachment Scale measuring anxiety (Collins & Read, 1990); Depend = subscale of the Revised Adult Attachment Scale measuring comfort depending on others (Collins & Read, 1990); Close = subscale of the Revised Adult Attachment Scale measuring comfort with closeness (Collins & Read, 1990); satisfaction = Marital Adjustment Test (Locke & Wallace, 1959); BDI = Beck Depression Inventory (Beck et al., 1961); Div. Att. = Attitudes About Divorce measure (Veroff, 1988); Neuroticism = Neuroticism subscale of the Eysenck Personality Questionnaire (Eysenck & Eysenck, 1978); Self-Esteem = Rosenberg Self-Esteem Scale (Rosenberg, 1965).

marriage, we found that over time (a) on average, anxiety about abandonment decreased linearly and comfort depending on others increased linearly; (b) comfort with closeness showed no systematic change but instead varied around its mean; and (c) the three attachment dimensions covaried with marital satisfaction. Lower levels of satisfaction were associated with greater insecurity. We used these results as a starting point for the HLM analyses in this study. As noted above, HLM begins with a specification of trajectories of change in the dependent variables. We skipped this step and used the information from the prior analyses. Hence, we proceeded directly to examining whether the parameters summarizing change could be predicted from other within- or between-subjects variables.

In this study, we were interested in the association between a between-subjects variable and attachment insecurity. Specifically, we examined whether the three marital outcome groups showed different trajectories of insecurity. We predicted that, compared with the divorced and married/happy spouses, the married/unhappy spouses would show (a) lower mean levels of anxiety about abandonment at T1, (b) lower mean levels of anxiety about abandonment over the course of the study, but (c) no differences in slopes. We did not expect slopes to differ because our model suggests only that married/unhappy spouses

show low levels of security. There is no reason to expect that they systematically become more or less secure over time. No differences among the groups should emerge for comfort with closeness and comfort depending on others.

Because marital outcome was a three-group categorical variable, we followed procedures described by Aiken and West (1991) and computed two dummy-coded variables to represent the $G - 1$ orthogonal contrast, where G represents the number of groups. Each set of two dummy-coded variables compares each of two outcome groups with a control group. For example, to compare the divorced and married/happy groups to the married/unhappy group, the following dummy-coded variables would be created and entered into the analysis simultaneously: (a) divorced spouses versus all other participants (coded 1 and 0, respectively) and (b) married/happy spouses versus all other participants (coded 1 and 0, respectively). The resulting coefficient for each dummy-coded variable describes the direction and magnitude of the effect in the outcome group compared to the control group and indicates whether each outcome group differs significantly from the married/unhappy group. For example, in an examination of the association between outcome group and anxiety about attachment, an intercept that was positive for the married/unhappy group but negative and significant for the married/happy group and for the divorced group would indicate that the married/happy group and the divorced group showed significantly lower mean levels of anxiety about abandonment than did the married/unhappy group.

Aiken and West (1991) suggested that if comparisons are desired among all three groups, as in this study, then two sets of dummy-coded variables should be computed, with each specifying a different control group. Then one analysis should be run for each set of dummy-coded variables. These analyses will contain all possible comparisons among the groups (three unique comparisons in this case). Therefore, for each set of dummy-coded variables, we conducted one analysis and examined whether trajectories differed among the groups.

Three sets of analyses, one for each dimension of attachment security, were conducted. Because the dimensions were correlated, we controlled for their association. For example, when predicting the trajectory of anxiety about abandonment, we included comfort with closeness and comfort depending on others as time-varying covariates. The results of the analyses thus allow for conclusions about the association between anxiety about abandonment and marital outcome group while controlling for the association between anxiety about abandonment and the other two attachment dimensions. Finally, data were analyzed at the couple level (i.e., including both husbands and wives in the analyses; see Raudenbush, Brennan, & Barnett, 1995) to control for dependencies in partner data.[5] For all analyses, the HLM/2L computer program (Bryk, Raudenbush, & Congdon, 1994) was used. One hundred sixty-three couples provided a sufficient number of data points for use in the analyses.

Results

Means and standard deviations for all variables are shown in Table 1.

Association Between Anxiety About Abandonment and Marital Outcome

We hypothesized that concerns about abandonment and love worthiness would be associated with being unhappily married. As such, the married/unhappy group should show the highest levels of anxiety about abandonment compared with the other groups. Following Davila et al. (1999), the trajectory of anxiety about abandonment was specified as linear with the following weights: 0, 1, 2, 3, and 4. These weights produce intercept estimates that correspond to spouses' T1 anxiety about abandonment. Thus, group differences in intercepts provide information about differences at T1. This point is important because we suggested that our findings could have implications for identifying couples at risk for stable unhappy marriages. Finding group differences at T1 would indicate that at-risk couples could be identified in the first 6 months of marriage.

In the first HLM analysis, we predicted husbands' and wives' trajectories of anxiety about abandonment simultaneously from the dummy-coded group variables (for husbands and for wives) with married/unhappy spouses as the control group, controlling for comfort with

[5] It is important to note that the analyses conducted controlled for dependencies in partners' trajectory parameters, as described by Raudenbush et al. (1995) but not for dependencies in within-couple residuals. The HLM program used for data analysis does not allow for the specification of different models of the variance–covariance structure of the residuals. However, we are not aware of any evidence suggesting that specification of different models for the error structure would affect the results of the analyses reported here.

closeness and comfort depending on others.[6] A second analysis was run with the dummy-coded group variables with divorced spouses as the control group. Table 2 presents the parameter coefficients.

The results supported our predictions for husbands and wives. Married/unhappy spouses showed higher initial levels of anxiety about abandonment than both married/happy and divorced spouses (who did not differ from one another). The groups did not, however, differ in slopes. The intercept coefficients in Table 2 can be interpreted as follows. At T1, married/unhappy husbands' average scores for anxiety about abandonment were 17.37. Divorced husbands' average scores were significantly lower by 3.52 points, and married/happy husbands' average scores were significantly lower by 3.14 points. Married/unhappy wives' average T1 scores were 18.01. Divorced wives' average scores were significantly lower by 7.43 points, and married/happy wives' average scores were significantly lower by 6.13 points. Both comfort with closeness—husbands $t(160) = -7.02, p < .001$; wives $t(160) = -4.76$, $p < .001$—and comfort depending on others—husbands $t(160) = -5.46$, $p < .001$; wives $t(160) = -5.15, p < .001$—were significant predictors of anxiety about abandonment.

Because we predicted that married/unhappy spouses would show higher mean levels of anxiety about abandonment over the course of the study in addition to at T1, we conducted an additional HLM analysis examining mean levels over time. This mean and variance model estimated intercepts defined as the average over time but did not include the linear parameter. This strategy is reasonable given that marital outcome groups did not differ in slopes. However, as previous analyses have shown (Davila et al., 1999), a model with the linear parameter included is a better representation of the overall growth in the data. The analysis with the mean and variance model also supported our predictions. As shown in the top half of Table 3, married/unhappy spouses showed higher mean levels of anxiety about abandonment than both married/happy and divorced spouses (who did not differ from one another). Again, both comfort with closeness—husbands $t(160) = -7.09$, $p < .001$; wives $t(160) = -4.08$, $p < .001$—and comfort depending on others—husbands $t(160) = -5.33$, $p < .001$; wives $t(160) = -5.36, p < .001$—were significant predictors of anxiety about abandonment.

[6] The equations for this analysis are presented here as an example of how the models were specified.

For a Level 1 model,

$$Y = B1(H) + B2(W) + B3(HLIN) + B4(WLIN) + B5(CLOH) + B6(CLOW) + B7(DEPH) + B8(DEPW) + R.$$

In this model, Y is the scores for anxiety about abandonment, $B1(H)$ is the husbands' intercept (T1 scores) for anxiety about abandonment, $B2(W)$ is the wives' intercept (T1 scores) for anxiety about abandonment, $B3(HLIN)$ is the husbands' linear trajectory of anxiety about abandonment, $B4(WLIN)$ is the wives' linear trajectory of anxiety about abandonment, $B5(CLOH)$ is husbands' scores for comfort with closeness, $B6(CLOW)$ is wives' scores for comfort with closeness, $B7(DEPH)$ is husbands' scores for comfort depending on others, $B8(DEPW)$ is wives' scores for comfort depending on others, and R is residual variance.

For a Level 2 model,

$$B1 = G10 + G11(HDIV) + G12(HM) + U1$$

$$B2 = G20 + G21(WDIV) + G22(WM) + U2$$

$$B3 = G30 + G31(HDIV) + G32(HM) + U3$$

$$B4 = G40 + G41(WDIV) + G42(WM) + U4$$

$$B5 = G50$$

$$B6 = G60$$

$$B7 = G70 \quad \text{and}$$

$$B8 = G80.$$

In this model, $HDIV$ is the dummy-coded variable in which divorced husbands are coded as 1 and married/happy and married/unhappy husbands are coded as 0; HM is the dummy-coded variable in which married/happy husbands are coded as 1 and divorced and married/unhappy husbands are coded as 0; $WDIV$ is the dummy-coded variable in which divorced wives are coded as 1 and married/happy and married/unhappy wives are coded as 0; and WM is the dummy-coded variable in which married/happy wives are coded as 1 and divorced and married/

Table 2
Marital Outcome Group Differences in Attachment Variables

			Husbands			Wives		
Outcome	Parameter	Contrast	Coefficient	t^a	Effect size[b]	Coefficient	t^a	Effect size[b]
Anxiety	T1	M/U	17.37			18.01		
	intercept	Vs. D	−3.52	−2.43*	.19	−7.43	−3.73***	.28
		Vs. M/H	−3.14	−2.64**	.20	−6.13	−3.47***	.27
		D	13.84			10.58		
		Vs. M/H	0.39	0.40		1.30	1.21	
	Linear	M/U	−0.22			−0.36		
		Vs. D	0.14	0.34		0.24	0.49	
		Vs. M/H	−0.07	−0.25		0.05	0.12	
		D	−0.08			−0.12		
		Vs. M/H	−0.21	−0.66		−0.19	−0.62	
	Overall	M/U	17.20			17.20		
	intercept	Vs. D	−3.23	−2.61**	.20	−6.97	−3.85***	.29
		Vs. M/H	−3.24	−3.32**	.25	−6.05	−3.79***	.29
		D	13.97			10.23		
		Vs. M/H	−0.10	−0.11		0.92	0.93	
Depend	T1	M/U	15.98			18.22		
	intercept	Vs. D	2.17	1.74		2.24	1.37	
		Vs. M/H	3.73	3.77***	.28	2.91	2.05*	.16
		D	18.15			20.46		
		Vs. M/H	1.56	1.82		0.67	0.73	
	Linear	M/U	0.10			0.35		
		Vs. D	0.54	1.29		−0.32	−0.66	
		Vs. M/H	−0.02	−0.08		−0.29	−0.74	
		D	0.64			0.02		
		Vs. M/H	−0.56	−1.73		0.03	0.10	
	Overall	M/U	16.17			18.83		
	intercept	Vs. D	2.67	2.21**	.17	1.72	1.08	
		Vs. M/H	3.61	3.84***	.28	2.44	1.77	
		D	18.84			20.55		
		Vs. M/H	0.94	1.10		0.71	0.76	
Close	Overall	M/U	21.78			22.78		
	intercept	Vs. D	1.74	1.50		1.11	0.65	
		Vs. M/H	0.44	0.47		0.10	0.07	
		D	23.52			23.89		
		Vs. M/H	−1.30	−1.63		−1.01	−1.06	

Note. Anxiety = subscale of the Revised Adult Attachment Scale measuring anxiety (Collins & Read, 1990); Depend = subscale of the Revised Adult Attachment Scale measuring comfort depending on others (Collins & Read, 1990); Close = subscale of the Revised Adult Attachment Scale measuring comfort with closeness (Collins & Read, 1990). M/U = married/unhappy group; D = divorced group; M/H = married/happy group.
[a] t tests reflect the significance of comparisons between each group and the control group. For satisfaction, $df = 160$; for BDI, $df = 155$. [b] Effect sizes were computed with the following formula and are presented for significant effects only: $r = \sqrt{[t^2/(t^2 + df)]}$.
* $p < .05$. ** $p < .01$. *** $p < .001$.

unhappy wives are coded as 0. Hence, the equation for $B1$ compares husbands' intercepts for the married/unhappy group with those for the divorced and married/happy groups. The equation for $B2$ does the same for wives. The equation for $B3$ compares husbands' linear trajectories for the married/unhappy group with those for the divorced and married/happy groups. The equation for $B4$ does the same for wives.

Associations Among Comfort With Closeness, Comfort Depending on Others, and Marital Outcome

We predicted that comfort with closeness and comfort depending on others would not be associated with marital outcome. The results largely supported this prediction. Following Davila et al. (1999), the trajectory of comfort

Table 3
Marital Outcome Group Differences in Marital Satisfaction and Depressive Symptoms

			Husbands			Wives		
Outcome	Parameter	Contrast	Coefficient	t[a]	Effect size[b]	Coefficient	t[a]	Effect size[b]
Satisfaction	T1 intercept	M/U	99.86			110.19		
		Vs. D	25.00	5.21***	.37	15.33	2.73**	.21
		Vs. M/H	28.22	7.68***	.51	20.84	4.38***	.32
		D	124.86			125.53		
		Vs. M/H	3.21	0.93		5.50	1.65	
	Linear	M/U	−4.08			−4.74		
		Vs. D	−1.44	−1.20		−2.33	−1.68	
		Vs. M/H	3.08	4.09***	.30	3.23	3.08**	.24
		D	−5.23			−7.08		
		Vs. M/H	4.52	4.53***	.33	5.57	5.80***	.41
	Overall intercept	M/U	85.86			94.30		
		Vs. D	30.87	7.17***	.48	19.53	3.53**	.26
		Vs. M/H	39.58	12.17***	.68	32.49	6.95***	.47
		D	116.73			113.84		
		Vs. M/H	8.71	2.78**	.21	12.95	3.94***	.29
BDI	T1 intercept	M/U	6.38			11.74		
		Vs. D	−2.57	−1.95*	.15	−6.57	−4.03***	.31
		Vs. M/H	−3.20	−2.97**	.23	−7.14	−4.94***	.37
		D	3.81			5.18		
		Vs. M/H	−0.63	−0.72		−0.58	−0.67	
	Linear	M/U	−0.28			−0.39		
		Vs. D	−0.10	−0.27		0.78	0.47	
		Vs. M/H	0.07	0.29		−0.16	−0.11	
		D	−0.38			0.39		
		Vs. M/H	0.17	0.60		−0.94	−1.01	
	Quadratic	M/U				−0.20		
		Vs. D				0.11	0.26	
		Vs. M/H				0.40	1.06	
		D				−0.09		
		Vs. M/H				0.28	1.09	
	Overall intercept	M/U	5.66			11.00		
		Vs. D	−2.51	−2.27*	.17	−5.42	−3.84***	.28
		Vs. M/H	−3.11	−3.47**	.26	−6.20	−4.99***	.36
		D	3.15			5.58		
		Vs. M/H	−0.60	−0.81		−0.78	−1.02	

Note. Satisfaction = Marital Adjustment Test (Locke & Wallace, 1959); BDI = Beck Depression Inventory (Beck et al., 1961). M/U = married/unhappy group; D = divorced group; M/H = married/happy group.
[a] t tests reflect the significance of comparisons between each group and the control group. For satisfaction, $df = 160$; for BDI, $df = 155$. [b] Effect sizes were computed with the following formula and are presented for significant effects only: $r = \sqrt{[t^2/(t^2 + df)]}$.
* $p < .05$. ** $p < .01$. *** $p < .001$.

with closeness was specified as a mean and variance model. As shown in Table 2, the groups did not differ in levels of comfort with closeness. Anxiety about abandonment—husbands $t(160) = -5.95$, $p < .001$; wives $t(160) = -4.26$, $p < .001$—and comfort depending on others—husbands $t(160) = 8.43$, $p < .001$; wives $t(160) = 8.26$, $p < .001$—were significant predictors.

Also following Davila et al. (1999), the trajectory of comfort depending on others was specified as linear with the weights 0, 1, 2, 3, and 4 (producing intercept estimates that correspond to T1 comfort depending on others). As shown in Table 3, the only significant finding was that, for husbands and wives, the married/happy group had higher levels of T1 comfort depending on others than did the married/unhappy group. Neither the married/unhappy group nor the married/happy group differed from the divorced group. Comfort with closeness—husbands $t(160) = 9.04$, $p < .001$; wives $t(160) = 9.26$, $p < .001$—and anxiety about abandonment—husbands $t(160) =$

-4.51, $p < .001$; wives $t(160) = -5.87$, $p < .001$—were significant predictors of comfort depending on others.

However, in the analysis predicting mean level of comfort depending on others over time, for husbands, the married/unhappy group had significantly lower levels of comfort depending on others than the married/happy and divorced groups (Table 2). Again, comfort with closeness—husbands $t(160) = 9.18$, $p < .001$; wives $t(160) = 9.35$, $p < .001$—and anxiety about abandonment—husbands $t(160) = -4.61$, $p < .001$; wives $t(160) = -6.00$, $p < .001$—were significant predictors.

Association Between Marital Satisfaction and Marital Outcome

We also examined group differences in trajectories of satisfaction to rule out the possibility that the married/unhappy group was more satisfied than the divorced group. More satisfaction of the married/unhappy group than of the divorced group might explain why married/unhappy spouses had not yet divorced. The important distinction here is between the married/unhappy and divorced group, not between the married/unhappy and married/happy groups, because the latter two were defined on the basis of satisfaction scores. So, by definition, they differ at least in intercepts. Following Davila et al (1999), the trajectory of satisfaction was specified as linear with the weights 0, 1, 2, 3, 4, 5, 6, and 7 (producing intercept estimates that correspond to T1). As shown in Table 3, for both spouses, the married/unhappy group had lower T1 MAT scores than did the divorced group. In fact, the married/happy and divorced groups did not differ from one another. The married/unhappy group did not, however, differ from the divorced group in MAT slope. Instead, for both spouses, the married/happy group showed a less steep linear decline in MAT slope over time than the married/unhappy and divorced groups (who did not differ from one another). In an analysis predicting mean level of satisfaction over time, for both spouses, the married/unhappy group had lower MAT scores than the divorced group. Therefore, married/unhappy spouses were even less satisfied than divorced spouses initially and over time, although they did not show different rates of decreases in satisfaction over time.

Summary of Analyses Thus Far

To summarize, our hypotheses were strongly supported. Overall levels of anxiety about abandonment were highest among married/unhappy spouses, as were initial levels, suggesting that at-risk spouses can be identified within the first 6 months of marriage. Moreover, the association between insecurity and being married/unhappy was largely specific to anxiety about abandonment, although there was evidence that married/unhappy husbands also had low overall levels of comfort depending on others. It is important that there was no evidence that married/unhappy spouses were more satisfied than divorced spouses. In fact, for both spouses, the married/unhappy group was marked by more distress initially and over time than the divorced group.

Associations Among Attachment Insecurity, Marital Outcome, and Attitudes About Divorce

Next, we attempted to rule out the possibility that it is divorce attitudes that are associated with marital outcome, rather than high levels of anxiety about abandonment. First, we examined whether anxiety about abandonment was associated with divorce attitudes. We also examined the association between comfort depending on others and divorce attitudes given that husbands' overall levels of comfort depending on others were associated with being married/unhappy. We conducted HLM analyses predicting anxiety about abandonment and comfort depending on others from divorce attitudes at T1, controlling for the other attachment variables. As shown in Table 4, T1 levels and slopes and overall mean levels for the attachment variables were not associated with divorce attitudes.

Second, because divorce attitudes were measured at T1 only, we conducted a one-way analysis of variance (ANOVA) to determine whether the marital outcome groups differed in divorce attitudes. The outcome groups did not differ in wives' divorce attitudes, $F(2, 169) = 1.14$, $p = .32$, but they did differ in husbands', $F(2, 169) = 4.24$, $p = .02$. Divorced husbands ($M = 39.82$, $SD = 14.3$) had more positive attitudes, $p < .05$, than married/happy husbands ($M = 49.09$, $SD = 14.2$) and married/unhappy husbands ($M = 50.15$, $SD = 13.2$), who did not differ from one another.

Table 4
Associations Among the Attachment Variables and Divorce Attitudes, Presence of Children, Neuroticism, and Self-Esteem

		Divorce attitudes			Presence of children[a]			Neuroticism			Self-esteem		
Outcome	Parameter	Coefficient	$t(160)$	Effect size[b]	Coefficient	$t(160)$	Effect size[b]	Coefficient	$t(160)$	Effect size[b]	Coefficient	$t(160)$	Effect size[b]
						Husbands							
Anxiety	T1 intercept	0.01	0.63		−0.30	−0.45		0.38	6.42***	.45	−0.29	−4.64***	.34
	Linear	−0.39	−1.41		0.07	0.43		−0.02	−1.20		0.01	0.60	
	Overall	0.02	1.07		−0.20	−0.35		0.34	6.73***	.47	−0.26	−4.87***	.35
	intercept												
Depend	T1 intercept	−0.00	−0.07		0.73	1.23		−0.28	−5.19***	.38	0.10	1.75	
	Linear	−0.01	−1.57		0.08	0.47		−0.01	−0.67		0.02	1.37	
	Overall	0.01	0.73		0.92	1.55		−0.29	−5.80***	.42	0.13	2.50*	.19
	intercept												
						Wives							
Anxiety	T1 intercept	0.03	1.30		−0.49	−0.65		0.39	5.69***	.41	−0.41	−6.33***	.46
	Linear	0.00	0.13		0.09	0.53		−0.20	−1.33		0.02	1.10	
	Overall	0.03	1.52		−0.40	−0.58		0.35	5.61***	.39	−0.39	−6.56***	.45
	intercept												
Depend	T1 intercept	−0.01	−0.56		1.67	2.73**	.21	−0.21	−3.12***	.24	0.23	4.04***	.30
	Linear	0.00	0.48		−0.23	−1.46		−0.01	−0.63		0.01	0.76	
	Overall	−0.01	−0.28		1.31	2.12*		−0.23	−3.96***	.29	0.25	4.50***	.33
	intercept												

Note. Anxiety = subscale of the Revised Adult Attachment Scale measuring anxiety (Collins & Read, 1990); Depend = subscale of the Revised Adult Attachment Scale measuring comfort depending on others (Collins & Read, 1990).
[a] The presence of children is a categorical variable. Thus, the coefficient represents the comparison between spouses who have children and those who do not. [b] Effect sizes were computed with the following formula and are presented for significant effects only: $r = \sqrt{[t^2/(t^2 + df)]}$.
* $p < .05$. ** $p < .01$. *** $p < .001$.

To examine whether divorce attitudes or the attachment variables were more strongly associated with husbands' marital outcome group, we conducted a series of multinomial logistic regressions analyses in which we predicted outcome group from divorce attitudes and the attachment variables. Because the HLM analyses indicated that attachment slope variables were not associated with outcome group, we used T1 attachment and overall mean attachment (mean of T1 through T5) as predictors in the analyses. The results are shown in Table 5.

For the analysis predicting outcome group from husbands' T1 divorce attitudes and T1 anxiety about abandonment, deleting either divorce attitudes or anxiety about abandonment from the model significantly decreased model fit (a significant chi-square value indicates rejection of the null hypothesis that the parameter effect is zero). The probability of being in the divorced group compared with the married/unhappy group was predicted by both divorce attitudes and anxiety about abandonment. The probability of being in the married/happy group compared with the married/unhappy group was predicted by anxiety about abandonment but not divorce attitudes. As shown in Table 5, the results for the analyses including T1 divorce attitudes and mean anxiety about abandonment and T1 divorce attitudes and mean comfort depending on others were similar.

To summarize, divorce attitudes were not associated with being unhappily married for wives, but for husbands, both divorce attitudes and attachment insecurity were. However, although both insecurity and divorce attitudes predicted the probability of being divorced versus married/unhappy, only insecurity predicted the probability of married/happy versus married/unhappy. Therefore, attitudes against divorce are not uniquely associated with being married/unhappy, rather, they may be uniquely associated with being married.

Associations Among Attachment Insecurity, Marital Outcome, and the Presence of Children

Next, we attempted to rule out the possibility that it is the presence of children that is associated with being married but unhappy, rather than high levels of anxiety about abandonment and, for husbands, low levels of comfort depending on others. We conducted HLM analyses predicting anxiety about abandonment and comfort depending on others from the presence of children variable, controlling for the other attachment variables. As shown in Table 4, T1 levels and slopes and overall mean levels for both spouses' attachment variables were not associated with the presence of a child. However, for wives, comfort depending on others was. Wives who had a child had higher initial and overall mean levels of comfort depending on others. This finding raises the possibility that attachment security is related to the experience of having children.

The presence of children was also associated with marital outcome group; for wives, $\chi^2(2, N = 172) = 18.35, p < .001$, and for husbands, $\chi^2(2, N = 172) = 20.60, p < .001$. As shown in Table 6, for both spouses, the majority of those who were divorced did not have a child, whereas the majority of those who were married/happy did. However, distributions among married/unhappy spouses appeared to differ for husbands and wives. The majority of married/unhappy wives came from couples who had a child, suggesting that the presence of a child is associated with wives' being married but unhappy. On the other hand, married/unhappy husbands were more equally distributed.

Therefore, we conducted multinomial logistic regression analyses predicting outcome group from the presence of children and the attachment variables. As before, we used T1 attachment and overall mean attachment as predictors. As shown in Table 5, for both spouses, the attachment variables were consistently better predictors of marital outcome than was the presence of children. Therefore, to summarize, although the presence of children was associated with being married/unhappy, attachment insecurity was a better predictor.

Associations Among Attachment Insecurity, Marital Outcome, and Neuroticism

Next, we attempted to rule out the possibility that it is neuroticism that is associated with being married but unhappy, rather than high levels of anxiety about abandonment and, for

Table 5
Results of Multinomial Logistic Regression Analyses Predicting Marital Outcome Group

	Husbands					Wives				
		D vs. M/U		M/H vs. M/U			D vs. M/U		M/H vs. M/U	
Variable in analysis	χ^2 if deleted	*B*	Wald χ^2	*B*	Wald χ^2	χ^2 if deleted	*B*	Wald χ^2	*B*	Wald χ^2
Analysis 1										
T1 Divorce Attitudes	8.35*	−0.05	4.34*	−0.01	0.11					
T1 Anxiety	6.59*	−0.16	5.17*	−0.14	5.94*					
Analysis 2										
T1 Divorce Attitudes	8.99**	−0.06	4.90*	−0.01	0.23					
M Anxiety	13.02***	−0.24	6.64**	−0.27	11.56**					
Analysis 3										
T1 Divorce Attitudes	8.70**	−0.06	5.96*	−0.01	0.32					
M Depend	15.39***	0.22	5.56*	0.29	12.30***					
Analysis 4										
Presence of children	20.55**	−1.35	2.87	0.89	2.18	18.82***	−2.39	4.98*	−0.19	0.04
T1 Anxiety	6.61	−0.16	5.12*	−0.13	5.71*	10.46**	−0.30	8.77**	−0.22	6.32*
Analysis 5										
Presence of children	21.15***	−1.23	2.29	1.03	2.71	20.08***	−3.01	7.68**	−0.80	0.74
M Anxiety	12.82**	−0.23	6.19*	−0.26	11.67**	11.86**	−0.34	9.51**	−0.28	8.29**
Analysis 6										
Presence of children	20.23***	−1.33	2.76	0.91	2.14					
M Depend	14.56**	0.20	4.76*	0.28	11.98**					
Analysis 7										
T1 Neuroticism						2.86	−0.17	2.12	−0.18	2.68
T1 Anxiety						5.62[a]	−0.23	4.96*	−0.17	3.56[a]
Analysis 8										
T1 Neuroticism						2.32	−0.16	1.94	−0.15	2.24
M Anxiety						5.86*	−0.24	4.81*	−0.21	5.01*
Analysis 9										
T1 Self-Esteem						2.20	0.02	0.85	0.08	1.01
T1 Anxiety						8.91**	−0.31	7.41**	−0.21	4.50*
Analysis 10										
T1 Self-Esteem						2.52	0.06	0.53	0.11	2.06
M Anxiety						7.63*	−0.30	6.56**	−0.23	5.04*

Note. Divorce Attitudes = Attitudes About Divorce (Veroff, 1988); Anxiety = subscale of the Revised Adult Attachment Scale measuring anxiety (Collins & Read, 1990); Depend = subscale of the Revised Adult Attachment Scale measuring comfort depending on others (Collins & Read, 1990); Neuroticism = subscale of the Eysenck Personality Questionnaire measuring neuroticism (Eysenck & Eysenck, 1978); Self-Esteem = Rosenberg Self-Esteem Scale (Rosenberg, 1965). M/U = married/unhappy group; D = divorced group; M/H = married/happy group.
[a] $p = .06$.
* $p < .05$. ** $p < .01$. *** $p < .001$.

husbands, low levels of comfort depending on others. We conducted HLM analyses predicting anxiety about abandonment and comfort depending on others from neuroticism at T1, controlling for the other attachment variables. As shown in Table 4, T1 levels and overall mean levels (but not slopes) for the attachment variables were associated with neuroticism. High

Table 6
Chi-Square Analyses Examining the Association Between Marital Outcome Group and Presence of a Child

Marital outcome group	Husbands					Wives				
	Presence of a child?					Presence of a child?				
	Yes		No		Total	Yes		No		Total
	N	%	*N*	%	*N*	*N*	%	*N*	%	*N*
Married/unhappy	6	46	7	54	13	5	71	2	29	7
Married/happy	93	68	44	32	137	94	66	49	33	143
Divorced	4	18	18	81	22	4	18	18	81	22
Total	103		69		172	103		69		172

levels of neuroticism were associated with higher levels of anxiety about abandonment and lower levels of comfort depending on others.

Because neuroticism was measured at T1 only, we conducted a one-way ANOVA to determine whether the marital outcome groups differed in neuroticism. Husbands' outcome groups did not differ significantly in neuroticism, $F(2, 166) = 2.45$, $p = .09$, but wives' did, $F(2, 166) = 3.23$, $p = .04$. Married/unhappy wives ($M = 13.71$, $SD = 3.1$) had higher levels of neuroticism, $p < .02$, than married/happy wives ($M = 9.14$, $SD = 4.9$) and divorced wives ($M = 8.81$, $SD = 4.0$), who did not differ from one another.

We then conducted multinomial logistic regression analyses in which we predicted wives' outcome group from neuroticism and the attachment variables. As before, we used T1 attachment and overall mean attachment as predictors. As shown in Table 5, anxiety about abandonment was a better predictor of marital outcome than was neuroticism. In summary, there is no evidence for either spouse that neuroticism was a better predictor of being married/unhappy than was insecurity.

Associations Among Attachment Insecurity, Marital Outcome, and Self-Esteem

Finally, we attempted to rule out the possibility that it is low self-esteem that is associated with being married but unhappy, rather than high levels of anxiety about abandonment and, for husbands, low levels of comfort depending on others. We conducted HLM analyses predicting anxiety about abandonment and comfort depending on others from self-esteem at T1, controlling for the other attachment variables. As shown in Table 4, T1 levels and overall mean levels (but not slopes) for attachment variables were associated with self-esteem (although this effect was marginal for husbands' T1 level of comfort depending on others). Low levels of self-esteem were associated with higher levels of anxiety about abandonment and lower levels of comfort depending on others.

Because self-esteem was measured at T1 only, we conducted a one-way ANOVA to determine whether the marital outcome groups differed in self-esteem. Husbands' outcome groups did not differ significantly in self-esteem, $F(2, 167) = 1.14$, $p = .32$, but wives' did, $F(2, 167) = 4.11$, $p = .02$. Married/unhappy wives ($M = 28.86$, $SD = 4.5$) had lower levels of self-esteem, $p < .05$, than married/happy wives ($M = 34.22$, $SD = 4.9$) and divorced wives ($M = 33.73$, $SD = 4.3$).

We again conducted a series of multinomial logistic regression analyses in which we predicted wives' outcome group from self-esteem and the attachment variables. As before, we used T1 attachment and overall mean attachment as predictors. As shown in Table 5, anxiety about abandonment was a better predictor of marital outcome than was self-esteem. In summary, there is no evidence for either spouse that self-esteem was a better predictor of being married/unhappy than was insecurity.

Summary of the Analyses Designed to Rule Out Competing Explanations

We examined whether four variables—divorce attitudes, presence of children, neuroticism, and self-esteem—better accounted for marital outcome than did anxiety about aban-

donment (and comfort depending on others for husbands). In all cases, attachment variables were more strongly associated with being married/unhappy than were the other variables.

Association Between Marital Outcome and Depressive Symptoms

The final analyses tested whether depressive symptoms were associated with marital outcome group. Before conducting explanatory HLM analyses, we needed to describe the trajectory of depressive symptoms over time. Karney (2001) found that depressive symptoms were best described by a mean and variance model in an eight-wave sample of newlyweds. However, examination of the means for T1 to T5 in the present sample (Table 2) indicates some evidence of a linear decrease for husbands. For wives, the pattern is more complex—variability followed by an increase in symptoms. To describe these trajectories, we tested a series of nested models and evaluated their fit. There are several ways to evaluate the relative fit of nested models. First, their deviance statistics can be compared to determine whether the models provide an equally adequate fit to the data. To determine whether two nested models differ significantly from one another, the deviance statistic of the nested model (e.g., a mean and variance model) is subtracted from that of the larger model (e.g., a linear model). If the resulting difference, distributed as chi-square, is significant, the model with the fewest parameter constraints (the larger model) can be said to provide a better description of the data. Also, the reliability estimates should be examined. In HLM the reliability of a parameter estimate is defined as the proportion of observed variance that can be treated as true variance. Reliabilities above approximately .4 are considered adequate or better. In addition, the parameter estimates should be examined to determine whether any parameters can be dropped. For example, when testing a quadratic model, if the quadratic coefficient is not different from zero, then that parameter can be dropped, as it suggests that systematic quadratic changes are not occurring.

First, we examined the mean and variance model in which scores would simply fluctuate around an individual's baseline without any systematic change. The mean parameter was reliable for husbands (.83) and wives (.84); mean BDI scores differed significantly from zero for husbands (3.65), $t(171) = 14.32$, $p < .001$, and wives (4.38), $t(171) = 16.62$, $p < .001$; and there was significant between-subjects variability for husbands, $\chi^2(171, N = 172) = 1{,}027.19$, $p < .001$, and wives, $\chi^2(171, N = 172) = 1{,}096.08$, $p < .001$. We then added the linear parameter to the model. This parameter was reliable for wives (.44) but not husbands (.09). There was a significant linear decline in the data for husbands (-0.27), $t(164) = -3.62$, $p = .001$, but not wives (0.12), $t(164) = 1.21$, $p = .23$, and there was significant between-subjects variability for wives, $\chi^2(164, N = 165) = 325.43$, $p < .001$, but not husbands, $\chi^2(164, N = 165) = 164.37$, $p = .48$. We compared the deviance statistic of the mean and variance model (7,879.10, 4 *df*) with that of the linear model (7,824.37, 11 *df*). The resulting difference (54.73, 7 *df*), $p < .001$, was significant, suggesting that the linear model provided a better fit to the data than did the mean and variance model. However, for husbands and wives, the intercept remained significant and showed significant variability. We then added a quadratic parameter to the model. This parameter approached a reliable level for wives (.35) but not husbands (.07). The intercept parameters remained significant, but the linear parameters became nonsignificant for husbands and wives. There was a significant positive quadratic effect in the data for wives (0.15), $t(157) = 2.08$, $p = .04$, but not husbands (-0.10), $t(157) = 1.79$, $p = .07$, and there was significant between-subjects variability for wives, $\chi^2(157, N = 158) = 227.38$, $p < .001$, but not husbands, $\chi^2(157, N = 158) = 128.59$, $p > .5$. We compared the deviance statistic of the linear model (7,824.37, 11 *df*) with that of the quadratic model (7,798.69, 22 *df*). The resulting difference (25.68, 11 *df*), $p < .001$, was significant, suggesting that the quadratic model provided a better fit to the data than did the linear model. The above results suggest that the trajectory of husbands' depressive symptoms is most reliably characterized by a mean and variance model, but some linear decline is evident. The trajectory of wives' depressive symptoms is best characterized by a quadratic model. Husbands show a linear decrease in depressive symptoms over time, but wives show a quadratic increase.

Next, we examined whether the marital out-

come groups differed in trajectories of depressive symptoms. In the first HLM analysis, we predicted husbands' and wives' trajectories of depressive symptoms simultaneously from a dummy-coded group variable (one for husbands and one for wives) with married/unhappy spouses as the control group, controlling for anxiety about abandonment. A second analysis was run with the dummy-coded group variable with divorced spouses as the control group. Table 3 presents the parameter coefficients. Married/unhappy spouses showed higher initial levels of depressive symptoms than both married/happy spouses and divorced spouses (who did not differ from one another). The groups did not, however, differ in the linear or quadratic parameters. In addition, high levels of anxiety about abandonment covaried with depressive symptoms for husbands, $t(155) = 3.89$, $p < .001$, but not wives, $t(155) = 1.62$, $p = .11$. As with the attachment variables, we also tested a mean and variance model to examine whether groups differed in overall mean levels of depressive symptoms, again controlling for anxiety about abandonment. As shown in Table 3, married/unhappy spouses showed higher mean levels of symptoms than both married/happy spouses and divorced spouses (who did not differ from one another).

Supplementary Analyses

By categorizing people into marital outcome groups, we sacrificed some of the variability in marital satisfaction that exists within the groups. Although, as described earlier, the groups are distinct in their levels of satisfaction and the data strongly supported our predictions, the analyses failed to describe basic associations between satisfaction and insecurity over time. As noted earlier, prior HLM analyses of these data (Davila et al., 1999) indicated that the attachment variables and marital satisfaction covary over time. We built on these analyses by examining whether the strength of the association between satisfaction and insecurity differs across the marital outcome groups. We examined anxiety about abandonment and comfort depending on others because they were uniquely associated with being unhappily married.

In the first set of analyses, we simultaneously predicted husbands' and wives' anxiety about abandonment from marital satisfaction (as a time-varying covariate), controlling for the linear trajectory of anxiety about abandonment, and we examined whether the marital outcome groups differed in the strength of this association by including the dummy-coded group variables. None of the groups differed from one another. Similar analyses were conducted with comfort depending on others as the outcome. Again, the groups did not differ. Therefore, the association between insecurity and satisfaction is similar for all spouses regardless of their marital outcome group. This means that by categorizing spouses into groups, we did not mask any associations between attachment security and marital satisfaction, nor did we create a grouping that changed the nature of the association between security and satisfaction.

To further support the notion that our groupings did not lead to idiosyncratic findings, we reconducted all analyses using less stringent criteria for categorizing spouses as married/happy versus married/unhappy. Specifically, spouses were considered married/unhappy if their average MAT score over the assessment points was less than 100 (15 husbands and 12 wives). The analyses yielded the same pattern of results.

Discussion

In this study, we focused on a neglected marital outcome group—spouses who are in stable unhappy marriages—and tested the hypothesis that attachment insecurity, in the form of concerns about abandonment and love worthiness, is associated with spouses remaining in an unhappy marriage. This hypothesis was strongly supported, even when controlling for divorce attitudes, presence of a child, neuroticism, and self-esteem. High anxiety about abandonment (and low comfort depending on others for husbands) distinguished spouses who were unhappily married from those who were happily married and those who divorced. Although this study was correlational in nature, the findings suggest that spouses' insecurity may make them unhappy in their marriage and at the same time keep them in their marriage. Hence, the stability of such marriages may be grounded in insecurity rather than satisfaction.

Our findings for wives were consistent with those of Kirkpatrick and Davis (1994), who studied dating couples. We did not, however, find the same gender differences that Kirk-

patrick and Davis (1994) found. Unlike their dating men, the husbands in stable unhappy marriages in this study did show high levels of anxiety about abandonment. The different results may be due to the fact that Kirkpatrick and Davis (1994) used a categorical assessment of attachment, whereas ours was dimensional. The different findings may also indicate that dating and married men differ in the factors that lead them to stay in or leave relationships.

Importantly, differences between marital outcome groups were detected early in marriage. Spouses who remained in unhappy marriages over 4 years had the highest levels of insecurity within the first 6 months of marriage. This finding suggests that such anxieties do not develop slowly over time but are present practically from the beginning of and perhaps prior to marriage. This is important because it means that spouses who are at risk for a stable unhappy marriage can be identified early on and targeted for appropriate intervention. In addition, it is noteworthy that spouses in stable unhappy marriages showed lower levels of marital satisfaction initially and on average over time than spouses who went on to divorce. This finding highlights the fact that couples in stable unhappy marriages are unique right from the beginning of their marriages.

The rationale for targeting these at-risk spouses becomes even stronger when the findings regarding depressive symptoms are considered. Compared with happily married spouses and divorced spouses, spouses who were married but unhappy showed the highest levels of depressive symptoms early in their marriage and over the course of their marriage. This finding suggests that spouses in stable unhappy marriages experience a serious negative individual outcome. Although in our sample this outcome was subsyndromal, the means over time suggest fairly chronic symptoms that may put people at risk for worse symptoms in the future (e.g., Horwath, Johnson, Klerman, & Weissman, 1992).[7] Moreover, if depressive symptoms lead to increased marital distress in the future, as some studies indicate (e.g., Davila et al., 1997; Fincham et al., 1997), they may lead ultimately to negative outcomes for children of these marriages.

This study has a number of implications for marital research. First, the findings suggest that spouses in stable unhappy marriages differ in important ways from spouses in stable happy marriages and from spouses who divorce. Married but unhappy spouses have traditionally been included either in the "intact" group in studies examining intact versus nonintact couples or in the "dissatisfied/divorced" group in studies examining happily married versus unhappy and divorced couples. However, marital researchers have increasingly noted the importance of distinguishing marital distress from divorce and of focusing on various types of outcomes, including married but unhappy couples (e.g., Gottman, Coan, Carrere, & Swanson, 1998; Rogge & Bradbury, 1999; see also Berscheid & Lopes, 1997). Our findings suggest that spouses in stable unhappy marriages should continue to be a focus of attention, rather than being grouped with spouses with whom they overlap only partially.

Second, like research showing that attachment insecurity is associated with dissatisfaction, poor communication, and poor support behavior in marriage (e.g., Davila et al., 1999; Feeney et al., 1994; Kobak & Hazan, 1991), our findings suggest that a focus on adult attachment can help in understanding important marital outcomes. More broadly, our findings suggest that there are individual difference factors that, in addition to behavioral factors, help explain marital outcomes. This idea is consistent with recent efforts by marital researchers to develop integrative, multivariate approaches to understanding the course of marriage. For example, Karney and Bradbury (1995) proposed that the course of marriage is affected by various factors, including enduring vulnerabilities, such as attachment insecurity, that spouses may bring with them to marriage. Our results support the inclusion of such factors in models of marriage.

Because in this study we did not actually test whether attachment insecurity was present before marriage, it is not clear whether spouses' anxieties were longstanding personality traits or whether they were beliefs and feelings that emerged in the context of an unsatisfying premarital or marital relationship. These anxieties

[7] Mean depressive symptoms (as measured by BDI scores) for married/unhappy spouses from T1 to T5 were as follows: for wives, 11.86, 11.14, 10.57, 7.60, and 9.50; for husbands, 6.62, 7.46, 7.62, 4.83, and 5.11.

did exist within the first 6 months of marriage, suggesting either that they emerged very quickly after marriage or that they were present beforehand. However, the implications are the same whether attachment insecurity was long-standing or relationship specific. The way in which spouses think and feel about their own worth and their partners' commitment to them can affect the course of their marriage.

Third, our findings are consistent with and expand upon Drigotas and Rusbult's (1992) dependence model of breakups. If attachment insecurity can be construed as making people dependent on relationships, such that dependence needs are met simply by being in a relationship regardless of its quality, then this study supports the key hypothesis of the dependence model: that the decision to stay or leave a relationship is based on the level of dependence on the relationship. If their dependence needs are being fulfilled by the relationship, people will stay even if they are dissatisfied. Our findings thus offer a potential extension of the dependence model by suggesting that decisions to stay or leave may be affected by individual difference factors that make people more or less dependent and that make people view their alternatives in different ways.

A fourth implication regards the findings for depressive symptoms. Research has consistently shown an association between depressive symptoms and marital functioning (see Beach & Fincham, 1998, for a review), and this study does so as well. These findings may suggest that depressed spouses, because they show less satisfaction, are at higher risk for divorce. However, this study suggests that spouses with depressive symptoms also may be at risk for stable unhappy marriages. Future research should examine the circumstances under which depressive symptoms are associated with risk for divorce versus chronic marital distress.

Although this study had a number of important strengths, including a large longitudinal sample of newlyweds with multiple assessments over time, the results should be interpreted with the following in mind. First, the findings may apply only to experiences in the early years of marriage. Whether stable unhappy spouses will go on to divorce later is unknown. Second, our results are based on very few stable unhappy spouses, who may or may not be representative of other such spouses (although our sample size for husbands is similar to that of Heaton & Albrecht, 1991). In addition, the low rates of married/unhappy spouses may seem to suggest that this is not a large enough group of people to merit attention. However, our sample was relatively healthy compared with other married samples and, as such, we may have underestimated the number of distressed married couples in the general population (see Karney et al., 1995). Furthermore, from the perspective of prevention and intervention, early identification of such couples, even if their numbers are relatively few, is worth attention.

Third, we assessed attachment via self-report. Self-reported attachment is a valid indicator of peoples' consciously held beliefs and feelings about self, other, and relationships. However, other ways of assessing attachment (e.g., objectively coded interview or behavioral observation) may capture alternate aspects of the attachment system and may yield different results. In defense of self-report measures, however, they are correlated with interviewer-rated attachment when the interview and the self-report assess the same attachment relationship (e.g., when both assess romantic attachment; see Bartholomew & Shaver, 1998; Crowell, Fraley, & Shaver, 1999).

On a related note, the fact that all measures in the study were self-report may raise method variance concerns. For example, one might argue that our study simply shows that all bad things (e.g., insecurity or dissatisfaction) go together. However, this is not the case. If all bad things went together, then the least satisfied people would be the most insecure (which they are), but they would also be the most likely to divorce—which they are not. Our analyses of neuroticism and self-esteem also indicated that all bad things do not necessarily go together. Husbands' outcome groups did not differ on neuroticism or self-esteem, and even though wives' groups did, anxiety about abandonment distinguished itself from these other variables and was more strongly associated with wives' outcomes.

Finally, as we imply in our introduction, there may be other factors that render unhappy spouses unlikely to divorce. For example, Kelly and Conley (1987) note that whereas neuroticism may lead to marital distress, the presence or absence of other traits, such as impulsivity,

may determine whether the distress culminates in divorce or keeps spouses unhappily married. Kelly and Conley's (1987) perspective differs somewhat from ours. They suggest that something active needs to happen (e.g., acts on the part of an impulsive husband) for divorce to ensue. We suggest instead that divorce may be a natural outcome of distress and that something active has to happen (e.g., an insecure partner must be present) to keep couples unhappily married. In any case, there may be a number of pathways to stable unhappy marriages, and we encourage their exploration.

Implications for Application and Public Policy

This study highlights the potential value of developing intervention strategies that can help spouses who are at risk for stable unhappy marriages have more satisfying relationships—relationships whose stability is grounded in security rather than insecurity. Most existing marital distress prevention and intervention programs were not designed to explicitly address issues of security, regardless of whether security is defined as a personality variable or a relationship variable. There are exceptions to this orientation, at least for maritally distressed couples (e.g., emotionally focused therapy, Greenberg & Johnson, 1988; integrative couples therapy, Christensen, Jacobson, & Babcock, 1995), and the data reported here support extrapolation of these models to the development of preventive interventions.

Moreover, most prevention programs were designed to be enacted with all couples, with little attention paid to spouses' unique characteristics. The failure of programs to take security, or any other individual risk factor, into account may even be responsible for the somewhat weak, although promising, effects shown to date in the prevention literature (see Bradbury, Cohan, & Karney, 1998). Our findings indeed suggest that it may be important to know more about spouses' individual vulnerabilities before they are treated in order to provide them with the skills they most specifically need for the outcomes for which they are most at risk. Many individual risk factors, such as attachment security, can be assessed quickly, easily, and inexpensively. Such screening may be very cost effective if it can help identify spouses at greatest risk for ongoing marital distress.

Finally, in addition to being associated with negative relationship outcomes, attachment insecurity is associated with negative individual outcomes, such as depression (e.g., Carnelley, Pietromonaco, & Jaffe, 1994; Cole-Detke & Kobak, 1996), and negative outcomes for children of insecure parents (e.g., Cowan, Cohn, Cowan, & Pearson, 1996). As such, providing appropriate interventions to insecure spouses could have effects that extend beyond marital satisfaction to include individual and child well-being as well.

References

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions.* Newbury Park, CA: Sage.

Amato, P. R., & Rogers, S. J. (1999). Do attitudes toward divorce affect marital quality? *Journal of Family Issues, 20,* 69–86.

Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships, 7,* 147–178.

Bartholomew, K., & Shaver, P. R. (1998). Methods of assessing adult attachment: Do they converge? In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 25–45). New York: Guilford Press.

Baucom, D. H., Epstein, N., & Rankin, L. A. (1995). Cognitive aspects of cognitive-behavioral marital therapy. In N. S. Jacobson & A. S. Gurman (Eds.), *Clinical handbook of couple therapy* (pp. 65–90). New York: Guilford Press.

Beach, S. R. H., & Fincham, F. D. (1998). Marital processes and depression. In L. L'Abate (Ed.), *Family psychopathology: The relational roots of dysfunctional behavior* (pp. 256–279). New York: Guilford Press.

Beach, S. R. H., & O'Leary, K. D. (1993). Marital discord and dysphoria: For whom does the marital relationship predict depressive symptomatology? *Journal of Social and Personal Relationships, 10,* 405–420.

Beck, A. T., Steer, R. A., & Garbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty five years of evaluation. *Clinical Psychology Review, 8,* 77–100.

Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry, 5,* 462–467.

Berscheid, E., & Lopes, J. (1997). A temporal model of relationship satisfaction and stability. In R. J. Sternberg & M. Hojjat (Eds.), *Satisfaction in close relationships.* New York: Guilford Press.

Bradbury, T. N., Cohan, C. L., & Karney, B. R.

(1998). Optimizing longitudinal research for understanding and preventing marital dysfunction. In T. N. Bradbury (Ed.), *The developmental course of marital dysfunction* (pp. 279–311). New York: Cambridge University Press.

Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46–76). New York: Guilford Press.

Bryk, A. S., & Raudenbush, S. W. (1992). *Hierarchical linear models.* Newbury Park, CA: Sage.

Bryk, A. S., Raudenbush, S. W., & Congdon, R. T. (1994). *HLM: Hierarchical linear modeling with the HLM/2L and HLM/3L programs.* Chicago: Scientific Software International.

Carnelley, K. B., Pietromonaco, P. R., & Jaffe, K. (1994). Depression, working models of others, and relationship functioning. *Journal of Personality and Social Psychology, 66,* 127–140.

Christensen, A., Jacobson, N. S., & Babcock, J. C. (1995). Integrative behavioral couple therapy. In N. S. Jacobson & A. S. Gurman (Eds.), *Clinical handbook of couple therapy* (pp. 31–64). New York: Guilford Press.

Christian-Herman, J., O'Leary, K. D., & Avery-Leaf, S. (in press). The impact of severe negative life events in marriage on depression. *Journal of Social and Clinical Psychology.*

Cole-Detke, H., & Kobak, R. (1996). Attachment processes in eating disorder and depression. *Journal of Consulting and Clinical Psychology, 64,* 282–290.

Collins, N. L. (1996). Working models of attachment: Implications for explanation, emotion, and behavior. *Journal of Personality and Social Psychology, 71,* 810–832.

Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology, 58,* 644–663.

Cowan, P. A., Cohn, D. A., Cowan, C. P., & Pearson, J. L. (1996). Parents' attachment histories and children's externalizing and internalizing behaviors: Exploring family systems models of linkage. *Journal of Consulting and Clinical Psychology, 64,* 53–63.

Crowell, J. A., 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.

Davila, J., Bradbury, T. N., Cohan, C., & Tochluk, S. (1997). Marital functioning and depressive symptoms: Evidence for a stress generation model. *Journal of Personality and Social Psychology, 73,* 849–861.

Davila, J., Bradbury, T. N., & Fincham, F. D. (1998). Negative affectivity as a mediator of the association between attachment and marital satisfaction. *Personal Relationships, 5,* 467–484.

Davila, J., Karney, B. R., & Bradbury, T. N. (1999). Attachment change processes in the early years of marriage. *Journal of Personality and Social Psychology, 76,* 783–802.

Drigotas, S. M., & Rusbult, C. E. (1992). Should I stay or should I go? A dependence model of breakups. *Journal of Personality and Social Psychology, 62,* 62–87.

Eysenck, H. J., & Eysenck, S. B. G. (1978). *Manual for the Eysenck Personality Questionnaire.* Kent, England: Hodder and Stoughton.

Feeney, J. A., Noller, P., & Callan, V. J. (1994). Attachment style, communication, and satisfaction in the early years of marriage. *Advances in Personal Relationships, 5,* 269–308.

Fincham, F. D., Beach, S. R. H., Harold, G. T., & Osborne, L. N. (1997). Marital satisfaction and depression: Different causal relationships for men and women? *Psychological Science, 8,* 351–357.

Floyd, F. J., Markman, H. J., Kelly, S., Blumberg, S. L., & Stanley, S. (1995). Preventive intervention and relationship enhancement. In N. S. Jacobson & A. S. Gurman (Eds.), *Clinical handbook of couple therapy* (pp. 212–226). New York: Guilford Press.

Fraley, R. C., & Davis, K. E. (1997). Attachment formation and transfer in young adults' close friendships and romantic relationships. *Personal Relationships, 4,* 131–144.

Gottman, J. M., Coan, J., Carrere, S., & Swanson, C. (1998). Predicting marital happiness and stability from newlywed interaction. *Journal of Marriage and the Family, 60,* 5–22.

Greenberg, L. S., & Johnson, S. M. (1988). *Emotionally focused therapy for couples.* New York: Guilford Press.

Hazan, C., & Shaver, P. R. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52,* 511–534.

Hazan, C., & Shaver, P. R. (1994). Attachment as an organizational framework for research on close relationships. *Psychological Inquiry, 5,* 1–22.

Heaton, T. B., & Albrecht, S. L. (1991). Stable unhappy marriages. *Journal of Marriage and the Family, 53,* 747–758.

Horwath, E., Johnson, J., Klerman, K., & Weissman, M. (1992). Depressive symptoms as relative and attributable risk factors for first-onset major depression. *Archives of General Psychiatry, 49,* 817–823.

Jacobson, N. S., & Holtzworth-Munroe, A. (1986). Marital therapy: A social learning-cognitive perspective. In N. S. Jacobson & A. S. Gurman (Eds.), *Clinical handbook of marital therapy* (pp. 29–70). New York: Guilford Press.

Johnson, S. M., Hunsley, J., Greenberg, L., & Schindler, D. (1999). Emotionally focused couples ther-

apy: Status and challenges. *Clinical Psychology: Science and Practice, 6,* 67–79.

Karney, B. R. (2001). Depressive symptoms and marital satisfaction in the early years of marriage: The implications of a growth curve analysis. In S. R. H. Beach (Ed.), *Marital and family processes in depression.* Washington, DC: American Psychological Association.

Karney, B. R., & Bradbury, T. N. (1995). Assessing longitudinal change in marriage: An introduction to the analysis of growth curves. *Journal of Marriage and the Family, 54,* 582–594.

Karney, B. R., & Bradbury, T. N. (1997). Neuroticism, marital interaction, and the trajectory of marital satisfaction. *Journal of Personality and Social Psychology, 72,* 1075–1092.

Karney, B. R., Davila, J., Cohan, C. L., Sullivan, K. T., Johnson, M. D., & Bradbury, T. N. (1995). An empirical investigation of sampling strategies in longitudinal research on marriage. *Journal of Marriage and the Family, 57,* 909–920.

Kelly, E. L., & Conley, J. J. (1987). Personality and compatibility: A prospective analysis of marital stability and marital satisfaction. *Journal of Personality and Social Psychology, 52,* 27–40.

Kendler, K. S., Kessler, R. C., Walters, E. E., MacLean, C., Neale, M. C., Heath, A. C., & Eaves, L. J. (1995). Stressful life events, genetic liability, and onset of episode of major depression in women. *American Journal of Psychiatry, 162,* 833–842.

Kirkpatrick, L. A., & Davis, K. E. (1994). Attachment style, gender, and relationship stability: A longitudinal analysis. *Journal of Personality and Social Psychology, 66,* 502–512.

Kobak, R. R., & Hazan, C. (1991). Attachment in marriage: Effects of security and accuracy of working models. *Journal of Personality and Social Psychology, 60,* 861–869.

Kobak, R. R., Ruckdeschel, K., & Hazan, C. (1994). From symptom to signal: An attachment view of emotion in marital therapy. In S. Johnson & L. Greenberg (Eds.), *The heart of the matter: Perspective on emotion in marital therapy* (pp. 46–71). New York: Brunner/Mazel.

Kurdek, L. A. (1991). Predictors of increases in marital distress in newlywed couples: A 3-year prospective longitudinal study. *Developmental Psychology, 27,* 627–636.

Locke, H., & Wallace, K. (1959). Short marital adjustment and prediction tests: Their reliability and validity. *Marriage and Family Living, 21,* 251–255.

Murray, S. L., Holmes, J. G., & Griffin, D. W. (1996). The benefits of positive illusions: Idealization and the construction of satisfaction in close relationships. *Journal of Personality and Social Psychology, 70,* 79–98.

Norton, R. (1983). Measuring marital quality: A critical look at the dependent variable. *Journal of Marriage and the Family, 45,* 141–151.

Raudenbush, S. W., Brennan, R. T., & Barnett, R. C. (1995). A multivariate hierarchical model for studying psychological change within married couples. *Journal of Family Psychology, 9,* 161–174.

Rogge, R. D., & Bradbury, T. N. (1999). Till violence does us part: The differing roles of communication and aggression in predicting adverse marital outcomes. *Journal of Consulting and Clinical Psychology, 67,* 340–351.

Rosenberg, M. (1965). *Society and the adolescent self-image.* Princeton, NJ: Princeton University Press.

Rusbult, C. E. (1983). A longitudinal test of the investment model: The development (and deterioration) of satisfaction and commitment in heterosexual involvements. *Journal of Personality and Social Psychology, 45,* 101–117.

Senchak, M., & Leonard, K. E. (1992). Attachment styles and marital adjustment among newlywed couples. *Journal of Social and Personal Relationships, 9,* 51–64.

Shaver, P. R., & Hazan, C. (1993). Adult romantic attachment: Theory and evidence. *Advances in Personal Relationships, 4,* 29–70.

Simpson, J., Rholes, W., & Nelligan, J. (1992). Support seeking and support giving within couples in an anxiety provoking situation: The role of attachment styles. *Journal of Personality and Social Psychology, 62,* 434–446.

Spanier, G. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family, 42,* 15–27.

Sullivan, K. T., & Bradbury, T. N. (1997). Are premarital prevention programs reaching couples at risk for marital dysfunction? *Journal of Consulting and Clinical Psychology, 65,* 24–30.

Swenson, D. (1996). A logit model of the probability of divorce. *Journal of Divorce and Remarriage, 25,* 173–194.

Veroff, J. (1988). *Attitudes About Divorce measure.* Unpublished manuscript, University of Michigan, Ann Arbor.

Waite, L. J., & Lillard, L. A. (1991). Children and marital disruption. *American Journal of Sociology, 96,* 930–953.

Waters, E. (1997, April). *The secure base concept in Bowlby's theory and current research.* Paper presented at the meeting of the Society for Research in Child Development, Washington, DC.

White, L. K., & Booth, A. (1991). Divorce over the life course: The role of marital happiness. *Journal of Family Issues, 12,* 5–21.

Received January 28, 2001
Revision received March 23, 2001
Accepted April 4, 2001 ■