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## Patterns of Change in Marital Satisfaction Over the Newlywed Years

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### Abstract

Although marital satisfaction starts high and declines for the average newlywed, some spouses may follow qualitatively distinct trajectories. Using eight self-reports of satisfaction collected over 4 years from 464 newlywed spouses, we identified five trajectory groups, including patterns defined by high intercepts and no declines in satisfaction, moderate intercepts and minimal declines, and low intercepts and substantial declines. The groups varied systematically in their 4- and 10-year divorce rates, and wives tended to follow more satisfying trajectories than their husbands. Personality traits, stress, aggression, and communication behaviors assessed shortly after marriage discriminated among groups in expected directions. We conclude by outlining theoretical and practical implications of identifying distinct and predictable patterns of change in relationship satisfaction.

### Keywords

Communication; divorce; gender; longitudinal; marriage and close relationships; marital satisfaction

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Perhaps the most robust finding in the marital literature is the honeymoon-is-over effect (Kurdek, 1998) or the “typical honeymoon then years of blandness” pattern (Aron, Norman, Aron, & Lewandowski, 2002, p. 182), whereby high initial levels of satisfaction inexorably decline as a marriage matures. Although there is some debate over whether these changes are primarily linear or nonlinear in form, there is little dispute that marriages on average are viewed as less fulfilling as time passes (e.g., Kurdek, 1998; VanLaningham, Johnson, & Amato, 2001). But does this pattern characterize change in satisfaction for the majority of spouses as they negotiate the early years of marriage? Or are there subgroups of newlyweds who are particularly vulnerable to rapid declines in satisfaction and others who do not decline much at all? If there is a subset of high-risk newlyweds, what factors distinguish them from other newlyweds? This article aims to answer those questions.

Recent cross-sectional findings indicate that marital distress may be categorical in nature (Whisman, Beach, & Snyder, 2008), and longitudinal studies have further suggested that qualitatively distinct patterns of change in satisfaction can be identified. A study of new parents assessed love, conflict, ambivalence, and communication in the last trimester of pregnancy and again when the child was 3, 9, and 36 months old (Belsky & Rovine, 1990). In contrast to the sample's mean pattern of decline, analysis of individual curves revealed patterns of accelerated decline, linear decline, no change, and modest positive increase; the last two groups comprised about half of the sample. Distinct patterns of change in marital

functioning from the 5th to the 10th year of marriage have also been examined (Belsky & Hsieh, 1998), with many couples maintaining a high level of marital functioning over time. Heterogeneity in change patterns is evident over longer spans as well: 20-year patterns of marital happiness among individuals who had been married more than 12 years on average at study onset revealed several subgroups, including a group with low marital happiness initially and large declines and a group that maintained high marital happiness over time (Kamp Dush, Taylor, & Kroeger, 2008).

These studies do not point to any consistent subgroups of change patterns, and because they focused on established couples, they bear only indirectly on the “typical honeymoon then years of blandness” effect. Nevertheless, the studies suggest that the mean pattern of decline subsumes subgroups of spouses distinguished by different change patterns. Clarifying and distinguishing further among these subgroups could have important implications for theories of marital change. For example, identifying categorically distinct types of change patterns would invoke different explanatory frameworks than would identifying patterns that differ only in degree. Moreover, if one or two qualitatively distinct groups of spouses were at particularly high risk for eventual relationship problems, then it would be efficient to direct intervention resources to those individuals rather than to newlyweds with more favorable risk profiles.

Our first aim is to determine whether the pattern of high initial satisfaction followed by steady declines typifies all newlyweds or whether large decreases in satisfaction are isolated among a subset of spouses. To address this aim, we applied mixture-modeling techniques (Nagin, 1999) to eight waves of marital satisfaction reports collected over 4 years to identify groups of husbands and wives with similar trajectories. We predict four main findings. First, the available research suggests that there will be identifiable subgroups of satisfaction trajectories over the early years of marriage. Second, one or more of those subgroups will include spouses with stable trajectories, and the subgroups will be more common among relatively satisfied marriages (Kamp Dush et al., 2008). Third, the subgroups of individuals declining in satisfaction will be isolated among those with moderate or low initial levels of satisfaction, on the basis of evidence that couples experiencing faster declines tend to have lower initial levels of satisfaction (e.g., Kurdek, 1998). Fourth, although we expect couples with lower average levels of satisfaction and faster rates of decline in satisfaction to experience higher rates of divorce over 4 and 10 years than couples in the other groups (see Kurdek, 2005), recent findings by Amato and Hohmann-Marriott (2007) suggest that divorce will also occur in marriages with relatively low levels of distress. Here we examine proportions of marriages that end in divorce and whether those proportions bear a systematic relationship to the trajectory subgroups.

### **Discriminating Among Marital Satisfaction Trajectories**

If meaningful groupings of spouses' 4-year satisfaction trajectories can be identified, which factors measured early in marriage will discriminate among them? According to a meta-analysis of more than 100 longitudinal studies of marriage (Karney & Bradbury, 1995), theoretical accounts of why specific spouses and couples achieve particular outcomes commonly draw attention to one of three primary domains of influence: personality traits and experiences prior to marriage (e.g., negative affectivity, parental divorce), the stressful events and circumstances that spouses and couples encounter once they are married (e.g., stress relating to work and health, transition to parenthood), and the emotions and communication skills spouses display while adapting to each other and the stress they confront (e.g., expressions of affection, displays of anger and aggression). The Vulnerability-Stress-Adaptation (VSA) framework integrates these factors by arguing that changes in relationship satisfaction are governed by the quality of couple interaction, which is in turn a product of the traits and experiences couples bring to the marriage and the

stresses that they negotiate. Reciprocal pathways are also assumed to operate: stress-generated deterioration in couple interaction is hypothesized to elicit more stress, for example, and drops in relationship satisfaction can degrade subsequent efforts at effective communication.

Several lines of research support the hypothesized associations among these domains (e.g., negative affectivity and observed couple communication [Donnellan, Conger, & Bryant, 2004]; personality and stress [Langer, Lawrence, & Barry, 2008]) and, perhaps more important, between these domains and relationship outcomes (e.g., chronic stress predicts declines in satisfaction [Neff & Karney, 2007]; the emotional tone of problem-solving discussions predicts changes in satisfaction and dissolution [Kim, Capaldi, & Crosby, 2007]). By connecting personal vulnerabilities, stress, and couple communication with categorically distinct trajectory groups, the present study aims to extend this research by (a) examining all three domains simultaneously and (b) testing whether differences among groups are better understood as resulting from deficits across multiple domains or from a specific deficit in one particular domain. For example, among those groups of spouses encountering relationship distress, we ask whether they display extreme scores in all three predictive domains or whether the antecedents of relationship distress are best viewed as resulting from extreme scores in a single domain. Problem-solving communication is the most viable single alternative, as it is most proximal to judgments of relationship satisfaction in the VSA model; is viewed as the sole cause of relationship change in other models (e.g., Gottman, 1994); and is the central target in interventions designed to prevent relationship distress and dissolution.

The second main goal of this study, therefore, is to examine how well maladaptive personality traits (neuroticism, trait anger, and self-esteem), chronic stress, and indices of communication and problem solving (positive emotion, negative emotion, physical aggression), assessed shortly after marriage, discriminate among spouses' 4-year trajectory groups. We predict on the basis of prior research that all of these variables will discriminate among the groups and, in view of the hypothesized covariation among the domains in the VSA model, we predict that differences among groups will arise from deficits across all three domains rather than from specific focal deficits. We test this prediction against the rival hypothesis that problem-solving communication will be the dominant factor discriminating among trajectory groups. We also examine whether demographic characteristics such as age, education, income, ethnicity, cohabitation prior to marriage, and having children during marriage distinguish among trajectory groups, as interpretation of these groups would differ depending on whether they varied systematically on these variables.

### **Comparing Husbands' and Wives' Satisfaction Trajectories**

Examining satisfaction trajectories allows us to investigate different perspectives on the nature and degree of correspondence between husbands' and wives' change patterns. It is commonly observed that husbands are more satisfied with their marriages than are wives. For example, in a national sample of 7,261 married couples, husbands were more satisfied than wives (Fowers, 1991), and in two large-scale national surveys in 1980 and 2000, wives reported less happiness, more conflict, more problems, and greater divorce proneness than husbands (Amato, Booth, Johnson, & Rogers, 2007). The transition to parenthood affects wives' satisfaction more than that of husbands (Twenge, Campbell, & Foster, 2003), and women are more likely than men to recognize marital problems and initiate marital therapy (Doss, Atkins, & Christensen, 2003) and divorce (e.g., Amato & Previti, 2003). Longitudinal studies, however, are more equivocal regarding patterning of differences in satisfaction: Some have indicated that newlywed wives have stronger declines in satisfaction than their husbands over the first few years of marriage (Kurdek, 2005), whereas other

studies have found no difference in husbands' and wives' satisfaction over the first 3 years of marriage (Lawrence et al., 2008).

The third main goal of the current study is to analyze how husbands' and wives' marital satisfaction trajectory groupings compare over time by examining, on a within-couple basis, the relative percentages of wives who, compared to their husbands' trajectories, are in similar groups, lower satisfaction groups, or higher satisfaction groups. We predict that a high proportion of husbands and wives will follow similar trajectories, but in those instances when discrepancies do arise, we expect on the basis of prior research that husbands will have more favorable trajectories than their wives. Cross-tabulating husbands' and wives' trajectory groupings also allows us to examine whether rates of divorce are higher when wives versus husbands are in the more distressed trajectory group. In view of evidence that wives tend to initiate divorce more than their husbands, we predict that the highest rates of divorce will occur when wives have lower trajectories than their husbands.

### The Current Study

We tested the three sets of hypotheses outlined above with data from two samples of newlyweds ( $Ns = 60$  and  $172$  couples, or  $464$  spouses) assessed eight times at 6-month intervals beginning shortly after marriage, together with 4-year and (in the larger sample) 10-year divorce rates. This design allowed for a finer grained analysis of change patterns than is possible with studies that use fewer assessments or long intervals between assessments. We focused on the early years of marriage because they are a time of great transition, into marriage and often into parenthood, and because divorce is common in this period (Bramlett & Mosher, 2001). Focusing on newlyweds also permitted the study of change patterns over a relatively uniform time frame, thus minimizing cohort effects and clarifying prior findings by Kamp Dush et al. (2008) in which individuals were married for varied lengths of time initially.

## Method

### Sampling and Participants

Participants were 232 newlywed couples from two longitudinal studies. Couples in both studies were eligible to participate if (a) this was the first marriage for both spouses, (b) the couple had been married for less than 6 months, (c) neither partner had children, (d) both partners were older than 18 years and wives were younger than 35 years (to allow for the possibility that all couples might become parents over the course of the study), (e) both spouses spoke English and had received at least a 10th grade education (to ensure comprehension of questionnaires), and (f) the couple had no immediate plans to move from the area.

The first sample comprised 60 newlywed couples recruited from newspaper advertisements in the Los Angeles area between February 1991 and October 1991. More than 350 couples responded to the advertisements; the first 60 couples who met the criteria were invited to participate. The second sample consisted of 172 newlywed couples identified from marriage licenses filed in Los Angeles County between May 1993 and January 1994. Couples who met the initial criteria were sent a letter inviting them to participate in the study. Of the 3,606 letters sent, 41 letters (1.1%) were undeliverable, 2,928 letters (81.2%) went unanswered, and 637 couples (17.7%) returned cards expressing interest in the project. The first 172 couples who met the criteria and arrived at their scheduled laboratory appointment constituted the second sample.

Analyses addressing our first aim (testing for subgroups of trajectories) and our third aim (comparing the trajectory groups of husbands and wives) made use of data from both

samples. We combined the two samples for these aims because (a) all couples met identical selection criteria; (b) the studies used highly similar data collection procedures and intervals; and (c) doing so afforded more power and likely elimination of small, spurious subgroups. Analyses undertaken to address our second aim (examining variables that might distinguish among derived trajectory subgroups) made use of self-report, interview, and observational data collected during the Time 1 laboratory visit in the sample of 172 couples. We did not use data from the 60-couple sample for the second aim because these couples did not provide videotaped interactional data.

For the combined sample, at the initial data collection, husbands averaged 27.0 years of age (standard deviation [*SD*] = 3.8) and 15.6 years of education (*SD* = 2.2), with a median annual income between \$21,000 and \$30,000. Sixty-nine percent were Caucasian, 14% were Latino-Chicano, 11% were Asian American–Pacific Islanders, and 4% were African American. Wives averaged 25.5 years of age (*SD* = 3.4) and 16.0 years of education (*SD* = 1.9), with a median annual income between \$11,000 and \$20,000. Sixty-five percent were Caucasian, 15% were Latina-Chicana, 13% were Asian American–Pacific Islanders, and 5% were African American.

## Procedure

Couples meeting all eligibility criteria were scheduled to attend a three-hour laboratory session and were mailed a packet of questionnaires to complete at home and bring with them to their session. Spouses were instructed by telephone and in a letter accompanying the questionnaires to complete their forms independently. During the session, spouses completed additional questionnaires, were interviewed individually, and participated in interaction tasks. At approximately 6-month intervals after the initial assessment, couples were mailed packets of questionnaires along with postage-paid return envelopes. At each follow-up, couples were reminded in telephone contacts and in cover letters to complete their forms independently. Depending on the sample, participants were paid \$50–\$75 initially and \$25–\$35 at each follow-up.

Accounting for couples who divorced over the course of the study, retention was relatively high. Retention among intact couples was 94% at Time 2 ( $n = 217$ ), 95% at Time 3 ( $n = 217$ ), 83% at Time 4 ( $n = 185$ ), 83% at Time 5 ( $n = 181$ ), 81% at Time 6 ( $n = 180$ ), 77% at Time 7 ( $n = 163$ ), and 81% at Time 8 ( $n = 165$ ). One of the advantages of semiparametric growth mixed modeling is that it accommodates missing data; hence, the present analyses included all subjects.

## Measures

**Marital satisfaction**—We assessed marital satisfaction with the widely used 15-item Marital Adjustment Test (MAT; Locke & Wallace, 1959). MAT scores range from 2 to 158, and higher scores indicate greater satisfaction. In our study, initial scores ranged from 58 to 158 for husbands ( $M = 125.0$ ,  $SD = 17.2$ ) and from 57 to 156 for wives ( $M = 127.4$ ,  $SD = 17.0$ ).

**Personality traits**—We assessed three traits shown to increase risk for relationship distress (see Karney & Bradbury, 1995), including neuroticism, with the 23-item Neuroticism scale of the Eysenck Personality Questionnaire (Eysenck & Eysenck, 1978; sample items: “Are you a worrier?” “Does your mood go up and down often?”). We assessed spouses' general tendency to be angry, without specific reference to the marriage, with the 25-item Multidimensional Anger Inventory (Siegel, 1986; e.g., “It is easy to make me angry” “I am secretly quite critical of others”). We assessed self-esteem with the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965; e.g., “On the whole I am satisfied with



myself" "At times I think I'm no good at all," reverse scored). Coefficient  $\alpha$  ranged from .83 to .87 across measures in the present samples, with very similar values for men and women.

**Chronic stress**—At Time 1, each spouse was interviewed individually to assess chronic stress using a version of a protocol that Hammen et al. (1987) developed. Spouses were asked to describe in detail the quality of nine life domains over the prior 6 months: the marriage, relationships with family, relationships with in-laws, relationships with friends, experiences at school and/or work, finances, own health, and spouse's health. For each domain, interviewers probed for concrete indicators of the ongoing stressors that the spouse may have been experiencing. After describing each domain, spouses rated their experiences in that domain over the prior 6 months on a 9-point scale (1 = *very positive circumstances*; 9 = *very stressful circumstances*). Ratings from the eight nonmarital domains were averaged to form a score indicating the overall level of nonmarital chronic stress experienced by each spouse at Time 1. The mean score was 3.14 ( $SD = 0.84$ ) for husbands and 3.18 ( $SD = 0.73$ ) for wives.

**Aggression**—We assessed aggression in the past year with the 18-item Conflict Tactics Scale (CTS-Form N; Straus, 1979). The first ten items assess verbal forms of conflict (e.g., insulting, sulking, threatening), and the final eight items assess physical aggression (e.g., throwing something at a spouse, pushing, slapping, hitting with object, threatening with weapon); each item was rated on a 3-point scale (0 = *never*, 1 = *once*, and 2 = *twice or more*). In the current study, we summed the items constituting the verbal aggression and physical violence subscales (items 4–6, 8–10, and 11–18; Straus, 1979) to create a composite aggression measure ( $\alpha = .68$  for husbands and  $.77$  for wives) yielding a mean score for husbands of 3.7 ( $SD = 3.1$ ) and for wives of 4.4 ( $SD = 3.7$ ).

**Problem-solving affect**—During the Time 1 lab sessions, each spouse identified a source of tension in the relationship that he or she would be willing to discuss with the partner for 10 minutes. Order of the two subsequent discussions was randomly determined. Displays of specific emotions during the discussions were coded from videotapes using the Specific Affect Coding System (SPAFF; Gottman, 1994), which instructs coders to emphasize facial expressions, posture, gestures, and voice tone and pitch when coding affect; verbal content was insufficient by itself for coding a specific affect. Discussions were divided into 5-second units to allow for the possibility that multiple emotions could occur in a speaking turn. Each unit was coded as displaying one of five negative affects (anger, contempt, whining, sadness, anxiety), one of three positive affects (humor, affection, interest), or neutral affect. We dropped whining, sadness, and anxiety because reliabilities or frequencies were too low. Following Johnson's (2002) factor analysis, we reduced the remaining codes to a positive composite (the sum of humor, affection, and interest) and a negative composite (the sum of anger and contempt). We created total scores on the indices by summing across the two conversations and, given high correlations between partners ( $r$ 's = 0.76 for positive affect and 0.62 for negative affect), summing across partners; the scores therefore represent couple-level variables. Interobserver reliability was adequate: intraclass correlation (ICC) = .83 (husbands' positive affect), .66 (husbands' negative affect), .68 (wives' positive affect), and .91 (wives' negative affect), all  $p < .01$ .

**Standardizing and aggregating measures**—To facilitate comparisons and analyses, we standardized scores on the above measures, within sex. As we had no specific predictions for the three personality measures, and in view of high correlations among them, we created a negative personality index by summing participants' standard scores on each of the measures (after first reverse coding self-esteem so that a positive  $z$ -score represented low

self-esteem), which we again standardized within sex. Table 1 shows correlations among variables.

## Results

### Analysis Plan

We used semiparametric group-based mixed modeling (Nagin, 1999) to address the first aim of the study. As with traditional longitudinal methods, this approach models the relationship between time and outcome with a polynomial function, including linear and quadratic terms. Unlike hierarchical and growth-curve modeling, which assume a continuous distribution of trajectories within the population and describe how growth varies continuously, this group-based approach assumes that the population consists of a number of groups with different trajectories and seeks to identify them (Nagin, 1999). As it is unlikely that the population falls into truly distinct groups, the patterns should be viewed as the best approximation of generally distinct experiences (Kamp Dush et al., 2008).

We used data to identify the optimal number of groups, the shape of the trajectory of each group, and the proportion of the sample belonging to each group. We determined the number of groups that best fit the data by evaluating models with more groups and evaluating fit using the Bayesian Information Criterion (BIC), with greater (less negative) values indicating better fit. The BIC values are greater as the sample size increases. It is important to note that the BIC favors models with fewer groups. We established a priori that we would choose the number of groups at which the BIC value was the greatest, provided that the smallest group constituted at least 6% of the sample (approximately 14 individuals). Lacking clear guidelines from the literature, we set this standard at twice that of work with similarly sized samples (Halliday-Boykins, Henggeler, Rowland, & DeLucia, 2004) to avoid overfitting the data while still capturing small but meaningful groups.

Parameters defining the shape of the trajectory were left free to vary across groups, and these coefficients were then used to calculate each individual's probability of group membership (posterior probability). Individuals were assigned to the trajectory group with which their posterior probability was greatest (Nagin, 1999). Once individuals were categorized as belonging to certain trajectory groups, they were assumed to have a similar pattern as all other individuals in that group. It is important to note that individuals in a trajectory group might have trajectories that do not exactly match the overall group trajectory, even if they followed approximately the same developmental course (Nagin & Tremblay, 2005).

We estimated models using SAS Proc Traj (Jones, Nagin, & Roeder, 2001). This procedure accommodated missing data; missing data were assumed to be missing at random, and we thus estimated trajectories using all available MAT observations. The procedure also did not require equal assessment intervals or identical assessment periods across participants (Nagin, 1999). We separately estimated trajectories for husbands and wives. We estimated models with intercept, linear, and quadratic coefficients, which we removed when analyses indicated they were not significant for particular groups.

### Results for Husbands

We began by estimating models with one trajectory group to identify the common trajectory for husbands. As expected, the graph showed a significant linear decline over the 4 years. We then calculated BIC values for two groups to determine whether a multitrajectory approach was justified by providing a better fit to the data. The BIC values increased from one-group (BIC =  $-6,840.72$ ) to two-group (BIC =  $-6,509.73$ ) models, which indicates that a single trajectory did not provide the best fit to the data. We increased group number until

best fit was achieved. The BIC values increased from three-group (BIC = -6,364.40) to four-group (-6,310.31) to five-group (-6,284.36) models. The smallest group size remained greater than 6% for each of the models estimated. The BIC values continued to increase for the six-group model (BIC = -6,270.50), but the smallest group fell below the 6% threshold at 5.8%. Accordingly, we adopted the five-group model.

Table 2 shows parameter estimates, and Figure 1 shows the observed trajectories. The five groups yielded by the model can be classified into trajectories that declined substantially over time and trajectories that declined minimally or remained stable over time. Among the groups with substantial declines in satisfaction, the “substantial decline–low” group began marriages in the distressed range ( $M = 92.40$ ) and then deteriorated in a linear fashion. The “substantial decline–moderate” group began with a moderate initial level of satisfaction ( $M = 118.76$ ) before experiencing a decline in satisfaction characterized by significant linear and quadratic terms, which indicates that the decline in satisfaction accelerated over time. Among groups that had minimal declines in satisfaction or remained stable over time, the “minimal decline–moderate” group began marriages with a moderate initial level of satisfaction ( $M = 116.80$ ) and then experienced a slight linear decrease in satisfaction over time. The “minimal decline–moderately high” group began marriages with a moderately high initial level of satisfaction ( $M = 133.89$ ) before experiencing a linear decrease in satisfaction. Last, the fifth group of husbands (“stable–high”) had only significant intercepts ( $M = 144.50$ ), which indicates that their satisfaction remained stable over time, at a high level.

**Marital dissolution**—We calculated 4-year rates of marital dissolution for each of the trajectory groups (see Table 3). Rates differed among trajectory groups overall,  $\chi^2(4, N = 228) = 23.69, p < .001$ , ranging from 4% in the “stable–high” group to 36% in the “substantial decline–low” group. We conducted additional analyses with husbands from the second sample ( $N = 172$ ) to examine whether the trajectory groups differed in rates of divorce over 10 years, 6 years after the last time point included in the trajectories (see Table 3). Again, rates of divorce differed significantly overall,  $\chi^2(4, N = 172) = 13.48, p < .01$ , and ranged from a low of 9% in the “stable–high” group to a high of 56% in the “substantial decline–low” group.

**Distinguishing among trajectory groups**—Using the VSA model, the second main aim of the study was to examine which factors assessed at Time 1 in the larger sample would distinguish among trajectory groups. We first examined demographic factors. We found no significant differences among husbands' groups for age, education, income, ethnicity, cohabitation prior to marriage, and whether they became fathers during the 4-year study (all  $p > .01$ ). As such, the trajectory groups in Figure 1 do not appear to be the result of demographic differences in group membership.

We then examined whether Time 1 measures of vulnerabilities, chronic stress, and adaptive processes would distinguish among groups. One-way analyses of variance (ANOVAs) showed significant differences among husbands' trajectory groups on the composite negative personality measure, observed positive affect, self-reported aggression, and chronic stress, but not for observed negative affect (for  $F$  values and standardized group means on each of the variables, see Table 4). Figure 2 graphs the means for each of the measures, for all trajectory groups. Consistent with predictions, group members tended to exhibit relative strengths or deficits across all domains of functioning rather than in one specific domain. Thus, whereas relatively high levels of negative personality, chronic stress, and aggression (all  $z > .89$ ) and relatively low levels of observed positive affect ( $z = -.52$ ) characterize the most distressed group, relatively low scores on the negative personality index, chronic stress, and aggression, and relatively high levels of observed positive affect tended to



characterize members of the two most satisfied groups. The remaining groups tended to fall between the two extremes.

### Results for Wives

We repeated the same procedures for wives, beginning with a one-group model. As with husbands, wives' common trajectory showed a significant linear decline over the first 4 years. The BIC values increased from one-group (BIC = -6,906.82) to two-group (BIC = -6,621.91) models, indicating that a single trajectory did not provide the best fit to the data. Accordingly, we continued increasing group number until best fit was achieved. The BIC values continued to increase from three-group (BIC = -6,485.10) to four-group (BIC = -6,432.96) to five-group (BIC = -6,421.84) models. The smallest group size remained greater than 6% for each model estimated. The BIC value continued to increase for the six-group model (BIC = -6,404.52), but the smallest group fell below the 6% threshold at 4.9%. As with husbands, the five-group model provided the best fit to the data.

Table 2 shows parameter estimates, and Figure 3 shows the observed trajectories. The five groups yielded by the model were very similar, though not identical, to the husbands' groups. Among the groups with substantial declines in satisfaction, the “substantial decline–low” group began marriages near the clinically distressed range ( $M = 104.85$ ) and had a linear decline in satisfaction. The “substantial decline–moderate” group began marriages with a moderate level of satisfaction ( $M = 113.48$ ) before undergoing an accelerated decline that stabilized in Year 3. Among the groups that had minimal declines in satisfaction or remained stable over time, the “minimal decline–moderate” group began marriages with a moderate initial level of satisfaction ( $M = 118.24$ ) and then experienced a slight linear decrease in satisfaction over time. The “minimal decline–moderately high” group began with a moderately high initial level of satisfaction ( $M = 133.51$ ) before experiencing a linear decline in satisfaction. The fifth and final group of wives (“stable–high”) had only significant intercepts ( $M = 145.09$ ), which indicates that their satisfaction remained stable over time, at a high level.

**Marital dissolution**—We calculated rates of dissolution over the 4 years for each of the trajectory groups (see Table 3). They ranged from a low of 3% in the “minimal decline–moderately high” group to a high of 54% in the “substantial decline–low” group, and differed significantly among trajectory groups overall,  $\chi^2(4, N = 228) = 35.68, p < .001$ . Analyses of 10-year data from spouses in the second sample ( $N = 172$ ) indicated that rates of divorce differed significantly overall,  $\chi^2(4, N = 172) = 23.48, p < .001$ . Rates ranged from a low of 13% in the “stable–high” group to a high of 60% in the “substantial decline–low” group (see Table 3).

**Distinguishing among trajectory groups**—As with husbands, none of the wives' demographic variables (age, education, income, ethnicity, cohabitation prior to marriage, and whether they became mothers during the course of the study) differentiated among trajectory groups (all  $p > .01$ ). One-way ANOVAs on wives' personality traits, stress, and adaptive processes showed significant differences among wives' trajectory groups on all the variables examined (composite negative personality, chronic stress, aggression, observed negative affect, and observed positive affect; for  $F$  values and standardized group means, see Table 4). Wives in the different groups tended to exhibit relative strengths or deficits across multiple domains of functioning rather than a focal or localized deficit in one domain (see Figure 4).

### Husband–Wife Cross-Tabulations

To address the third aim, we conducted cross-tabulations of husbands' group membership and wives' group membership. Table 3 shows the complete  $5 \times 5$  (25-cell) cross-tabulation for the full sample, with 4-year dissolution rates in parentheses in each cell. To simplify interpretation of Table 3, we computed the percentage of couples in which husbands and wives were in the same trajectory group, couples in which husbands were in a lower trajectory group than their wives (e.g., if a husband was in the “minimal decline–moderately high” group and his wife was in the “stable–high” group), and couples in which wives were in a lower trajectory group than their husbands (e.g., if a wife was in the “substantial decline–moderate” group and her husband was in the “minimal decline–moderate” group). In 94 of 232 couples (40.5%), husbands and wives were in the same trajectory group; in 85 of 232 couples (36.6%), husbands were in a lower trajectory group than their wives; and in 53 of 232 couples (22.8%), wives were in a lower trajectory group than their husbands. One-variable  $\chi^2$  tests indicated that the rates differed overall ( $\chi^2(2, N = 232) = 12.01, p < .01$ ). Follow-up analyses indicated that there were fewer couples in which wives were in a lower trajectory group than their husbands than couples in which wives and husbands were in the same trajectory group ( $\chi^2(1, N = 147) = 11.44, p < .01$ ) or couples in which husbands were in a lower trajectory group than their wives ( $\chi^2(1, N = 138) = 7.42, p < .01$ ). Thus, contrary to predictions and to published cross-sectional findings, in the 60% of couples in which spouses are assigned to different trajectory groups, relatively dissatisfied husbands outnumbered relatively dissatisfied wives.

We next examined rates of divorce among the three husband–wife comparative groups (same trajectory, wife higher and husband lower, wife lower and husband higher). Over the first 4 years, 10 of 93 couples (10.8%) in which husbands and wives were in the same trajectory group divorced, 8 of 84 couples (9.5%) in which husbands were in a lower trajectory group divorced, and 9 of 51 couples (17.7%) in which wives were in a lower trajectory group divorced. The  $\chi^2$  analyses comparing the rates of divorce among couples in which wives were in a lower trajectory group than their husbands to couples in which wives were in the same or a higher group than their husbands found no significant differences ( $\chi^2(1, N = 228) = 2.12, p = .15$ ). Among couples who were followed for 10 years, 12 of 67 couples (17.9%) in which husbands and wives were in the same trajectory group divorced, 14 of 68 couples (20.6%) in which husbands were in a lower trajectory group than their wives divorced, and 12 of 37 couples (32.5%) in which wives were in a lower trajectory group than their husbands divorced. The  $\chi^2$  analyses comparing divorce rates among couples in which wives were in a lower trajectory group than their husbands to couples in which wives were in the same or a higher group than their husbands found a marginally significant difference ( $\chi^2(1, N = 172) = 2.93, p = .09$ ).

### Discussion

We combined eight assessments of marital satisfaction data collected over the first 4 years of marriage with 4- and 10-year divorce rates to address whether there are meaningful subtypes of satisfaction trajectories, the factors that might differentiate among them, and the correspondence between husbands' and wives' trajectory patterns. The first main finding in this study is that meaningful subgroups of satisfaction trajectories can be identified over the first 4 years of marriage. Although high intercepts and negative linear slopes characterized the average trajectories for husbands and for wives, further analyses indicated that this general result subsumed five different groups of trajectories. The trajectories appear to be similar, though not identical, for husbands and wives (see Figures 1 and 3). Contrary to the honeymoon-is-over effect (Kurdek, 1998) and the “honeymoon then years of blandness” pattern (Aron et al., 2002, p. 182), these sets of trajectories included three groups of spouses reporting relatively high levels of satisfaction and small, if any, declines in satisfaction over

the eight assessments. About 13% of husbands and 20% of wives in the study were in the highest of these groups, and they reported stable and exceptionally high levels of satisfaction. In contrast, relationship dissatisfaction appeared to be isolated within two groups of trajectories that appear to be qualitatively distinct from the three relatively stable and satisfied trajectories. Characterized by low initial satisfaction scores, rapid linear declines in satisfaction, or both, those groups comprised about 19% of the sample; the more distressed of the groups—about 6% of the sample overall—reported chronic dissatisfaction over the first 4 years of marriage. In short, growing disenchantment in marriage does not appear to be inherent to marriage itself in the manner implied by the honeymoon-is-over effect but is instead confined to subgroups of spouses.

Rates of divorce corresponded closely with levels of marital satisfaction within the groups, increasing confidence that the trajectory groupings captured real differences in relationship experiences. After 4 years of marriage, for example, 3%–14% of the spouses in the three most satisfied groups had ended their marriage, whereas 25%–54% of spouses in the two least satisfied groups had done so. After 10 years, 9%–26% of the three most satisfied groups had ended their marriage, whereas 40%–60% of the two least satisfied groups had done so (see Table 3). Nonetheless, a high proportion of spouses who were demonstrably unhappy over the first 4 years of marriage remained married 6 years later, and more surprising, significant proportions of couples who negotiated the early years of marriage quite well eventually dissolved their partnership. This corroborates Amato and Hohmann-Marriott's (2007) observation that significant proportions of marriages designated as low in distress at one assessment had divorced over the following 5–7 years. We extend that finding by demonstrating that the high quality of these relationships prior to divorce was evident throughout the first 4 years of marriage and was reflected not only in self-report measures but also in interview-based assessments of chronic stress and observations of couple problem-solving communication. Moreover, within-couple cross-tabulation of trajectories in which both spouses were in the three most satisfied trajectory groups shows that an average of 14% of these relatively satisfied relationships ended in divorce over 10 years (Table 3), which rules out the possibility that the marriages ended because one partner was markedly distressed in the first 4 years of marriage.

The second aim of this study was to examine whether independent variables suggested by the VSA model (Karney & Bradbury, 1995) would discriminate among spouses in different trajectory groups. Among husbands and among wives, we found trajectory groups to differ on a composite index comprising neuroticism, low self-esteem, and trait anger; on an interview-based measure of chronic stress; on an index of verbal and physical aggression; on observed expressions of interest, affection, and humor; and for wives only, on observed expressions of anger and contempt. Moreover, spouses in different trajectory groups tended to exhibit relative strengths or deficits across multiple domains of functioning (e.g., personality, stress, and adaptive processes) rather than a focal or localized deficit in one domain. Table 4 shows a striking pattern in support of this contention, whereby spouses in the three most distressed trajectories had positive  $z$ -score values (or, in the case of positive affect, negative  $z$ -scores) in 29 of the 30 (97%) values, whereas husbands and wives assigned to the two most satisfying trajectories had negative  $z$ -score values (or positive  $z$ -scores for positive affect) in 18 of the 20 (90%) values.

Although we cannot make causal inferences on the basis of the present design, the results indicate that between-couple variability in satisfaction trajectories corresponds with variability in a broad-based and weakly intercorrelated set of risk factors (samplewide correlations among the variables ranged from .03 to .34 in absolute value, with a median value of .20). In contrast, sociodemographic factors did not discriminate among the groups. The small sample precludes finer grained comparisons, but Figure 2 shows that the husbands

who went on to have the most distressed trajectories had, as a group, relatively discrepant *z*-scores on the personality composite (.94 vs. .33 for the closest group), on chronic stress (.89 vs. .28 for the closest group), and on aggression (.96 vs. .30 for the closest group). There was no single comparable group among wives, though wives in the “substantial decline–moderate” group can be characterized, as newlyweds, as having relatively discrepant *z*-scores on displays of negative affect (.86 vs. .08 for the closest group) and reports of aggression (.84 vs. .48 for the closest group). Additional studies are needed to lend confidence to these findings, but the evidence presented here supports the proposal that the traits that spouses bring to their marriage, the recurring strains that they report 6 months into marriage, and the emotional quality of their problem-solving conversations as newlyweds all play a role in distinguishing spouses who vary in their experiences of relationship quality and longevity. It is important to note that there may be a group of husbands and one or more groups of wives who show elevated scores in at least two of the domains very early in marriage.

The third goal of this work was to investigate the patterning of husbands' and wives' trajectories, using husband–wife pairs. In contrast to predictions, wives were more likely than their husbands to be in trajectory groups reflecting relatively high levels of marital satisfaction. About 40% of husbands and wives were in similar trajectory groups, but 37% of wives were in trajectory groups reflecting relatively higher levels of marital satisfaction, whereas only 23% of husbands were. However, consistent with evidence that wives are more likely to seek divorce than men (e.g., Amato & Previti, 2003), we did find a marginally significant trend for 10-year rates of divorce to be highest among couples in which wives had lower trajectories than their husbands (32%), compared with those couples in which husbands had lower trajectories than their wives (21%). Thus, when husbands and wives are grouped in dissimilar trajectories, husbands tend to be the less satisfied partner, but relatively dissatisfied wives may be marginally more likely to seek a divorce than relatively dissatisfied husbands.

Before turning to discuss implications of the results, we first outline several factors that limit the conclusions that can be drawn from them. First, with regard to the semiparametric modeling approach adopted here, the number of trajectory groups in a sample is not immutable (Nagin & Tremblay, 2005). Rather, the sample size and number of assessments are likely to affect the number of groups and the shape of each group's trajectory. The groups we identified did resemble groups that others have reported using different methods or populations (e.g., Belsky & Hsieh, 1998), but more work is needed to identify the most common patterns among newlyweds. Second, because each trajectory group summarizes the average trend of the individuals in it (Nagin & Tremblay, 2005), individual trajectories may not match the group trajectory, even if they follow approximately the same developmental course. Thus, in the same way that it is important to exercise caution regarding the representativeness of the derived subgroups to the population, so, too, is it necessary to recognize that these subgroups do not fully capture the complexity of the individual trajectories. Third, distinct groups can be estimated even in the absence of population heterogeneity if the data are nonnormally distributed (Bauer & Curran, 2003), which further underscores the need for replication.

Although we collected data from diverse samples of newlywed couples eight times over the first 4 years of marriage, a fourth limitation is that the overall sample was relatively small and not nationally representative. The experience of reporting marital satisfaction every 6 months for 4 years might also affect a person's marital satisfaction, and thus may render the sample less representative. In addition, because older couples, previously married couples, and couples with children before marriage were excluded, the patterns of change identified here may not generalize to newlywed couples with these characteristics. Restricted

demographics in our samples may explain why we did not find differences between trajectory groups for any of the demographic variables studied. Fifth, the sample as a whole was relatively satisfied and the overall rate of divorce was lower than national averages. Thus, there may be subtypes of couples, particularly less satisfied groups, that we did not capture, and there may be even more variability in patterns and rates of divorce among samples that include a greater proportion of distressed couples. We note also that here we have examined only marital satisfaction trajectories. Although the derived groupings are similar to those in other studies with different dependent variables, more work is needed to determine whether other patterns would emerge with repeated measures of other variables. Finally, conducting analyses separately for husbands and wives allowed us to examine husband–wife differences on a within-dyad basis, but because spouses share relationship experiences, this may also inflate the degree of similarity in the trajectories we derived for husbands and wives, as well as the level of correspondence between them.

Notwithstanding these limitations, the findings reported here indicate that trajectories of relationship satisfaction can be understood to follow one of five patterns over the first 4 years of marriage and that a range of variables can distinguish among them. Whereas a large body of longitudinal research has evolved to explain how marriages become less satisfying over this period, as many as four in five spouses in the present sample tended to follow one of the three trajectories marked by relatively stable satisfaction scores and by varying but moderate-to-high levels of satisfaction. Gradations among those groups—particularly as reflected in their initial scores on negative personality traits, aggression, and positive emotion during problem solving (see Figures 2 and 4)—provide some insight into how the couples were able to maintain these levels of relationship functioning. At the same time, the fact that 9%–26% of spouses in these large groups eventually dissolved their marriages over 10 years highlights the need to understand why they ended, which is underscored by evidence that disruption of ostensibly satisfying relationships is particularly detrimental to any children involved (e.g., Booth & Amato, 2001). The new information provided here is that these relationships were indeed likely to be fulfilling over multiple assessments before they ended; that the end of some of the relationships was likely to have been relatively abrupt (as some divorces occurred in or shortly after the 4-year assessment window); and that at least within the set of predictor variables considered here, there was no obvious latent factor that eventually undermined the relationships. Additional research comparing the intact and dissolved marriages in these groups is needed to examine whether the variables considered here may have changed (e.g., chronic stress or aggression might have escalated, positive emotional expressions might have waned) or whether specific situations arose that destabilized the relationship by violating a personal standard (e.g., infidelity, drug use), by outstripping the couple's capacity for coping (e.g., death of a child), or by changing the very foundation of the partnership itself (e.g., a change in sexual identity, discovery that the partner does not want to have children). Thus, for these three more stable and satisfying trajectories, our results depict a complex portrait of marriages that spouses reported as fulfilling but, in some instances, proved precarious.

In the remaining two types of trajectories, in contrast, linear declines in satisfaction were more pronounced (see Table 2) and dissolution rates were higher, ranging from 40% to 60% over 10 years. As newlyweds, spouses in the lowest of the groups were already well below the sample mean in marital satisfaction and, particularly when compared to the spouses in the two highest-functioning trajectory groups, appeared to have some combination of more maladaptive personalities, higher levels of chronic stress, more aggression, and more distress-promoting problem-solving conversations. Although this finding indicates that early identification of at-risk couples is possible, it is nonetheless discouraging because it suggests that the task of strengthening these relationships must address a wide range of possible causes for the distress, some of which may be difficult to modify. Even intensive



communication training can fail to change negative behaviors, for example (Laurenceau, Stanley, Olmos-Gallo, Baucom, & Markman, 2004), and behavioral changes tend to dissipate rather than grow stronger as time passes (Hawkins, Blanchard, Baldwin, & Fawcett, 2008). The present findings help explain why this might be the case: left unaddressed, spouses' personalities, acts of verbal and physical aggression, and chronic stress might constrain the changes that are possible in communication-based education programs and then undermine the changes that do occur. Containing aggression, anger, and contempt are likely very valuable goals for all couples, but among couples in the highest-risk trajectory groupings, other potent factors (e.g., low self-esteem, negative affectivity, stress) might impose an upper limit on the benefits that such changes can produce.

A more general implication of this study is that social policies and interventions undertaken to strengthen marriages may face two different kinds of problems. One is the promotion of intimacy and the prevention of divorce among relatively satisfied couples, which might be achieved less by communication training and more by emphasizing relationship maintenance and enrichment, commitment, and the importance of stable partnerships for child development. The second, and arguably more difficult, task involves preventing relationship deterioration and dissolution among couples contending with personal distress, interpersonal tension, and chronic stress. This might be achieved less by emphasizing global values associated with marriage and more by (a) identifying at-risk couples, (b) teaching couples to impose and regularly maintain ground rules for safe and nonthreatening communication, and (c) exploring policies and strategies to reduce the challenging circumstances and chronic stresses likely to impede relationship maintenance. In short, by casting doubt on the “honeymoon then years of blandness” effect, and by identifying factors that discriminate among spouses' trajectory patterns, this study provides preliminary guidance for secondary prevention strategies likely to help different kinds of couples.

Finally, with regard to the third main focus of this work, the findings enhance understanding of gender differences in the early years of marriage in a few important ways. First, there is a relatively high degree of similarity in husbands' and wives' change patterns over the newlywed years—husbands and wives were in the same trajectory group in approximately 40% of couples—consistent with the view that the notion of his and her marriages has been exaggerated (Kurdek, 2005). However, when differences did exist, there were more couples in which husbands had lower trajectories than their wives than there were couples in which wives had lower trajectories than their husbands. This unexpected finding raises the question of why husbands may be less satisfied than their wives, especially if they do less housework and provide less childcare (Coltrane, 2000). One possibility is that the transition to marriage requires a greater adjustment on the part of men than women. The early years of marriage may be less satisfying for some men to the extent that they represent a loss of sexual and personal freedom. Indeed, the least satisfied group of husbands in this study was approximately 12 points more dissatisfied initially than the least satisfied group of wives (see Table 2).

We extend prior work showing that wives are more inclined to initiate couples therapy and divorce (Amato & Previti, 2003; Doss et al., 2003) by demonstrating that divorce was marginally more likely when wives were less satisfied than when husbands were less satisfied. Why might this be the case? We speculate that having a less satisfying marriage than one's spouse may be more distressing for women than men; to the extent that women are more oriented than men toward dyadic partnerships (see Baumeister & Sommer, 1997), being less satisfied than their spouse might be more salient and painful. Another possibility is that men may benefit from marriage in other ways (with regard to health, housework, and so on) that outweigh their comparative dissatisfaction, whereas wives do not receive these benefits and thus have fewer reasons to stay when they are more dissatisfied than their

spouse. Alternatively, the early years of marriage may be especially diagnostic for wives as a marker of how promising the couple's future will be. Young wives without children (as was the case here at the initial assessment) may be especially motivated early on to leave a marriage in which they are less satisfied than their husbands to have the chance to bear and raise children in another partnership. More work is needed to examine these possibilities, but our findings lead us to predict that the differential inclinations to divorce may weaken as women move beyond their early childbearing years.

## Acknowledgments

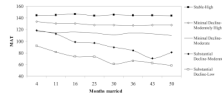
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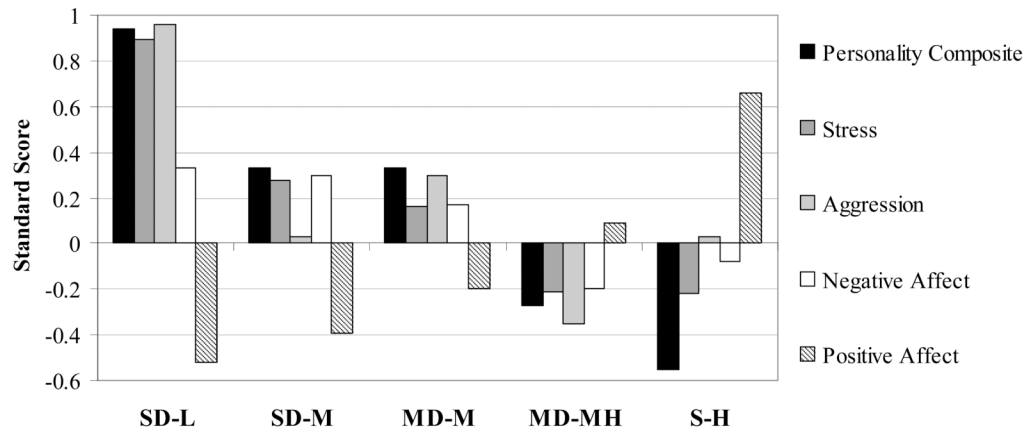
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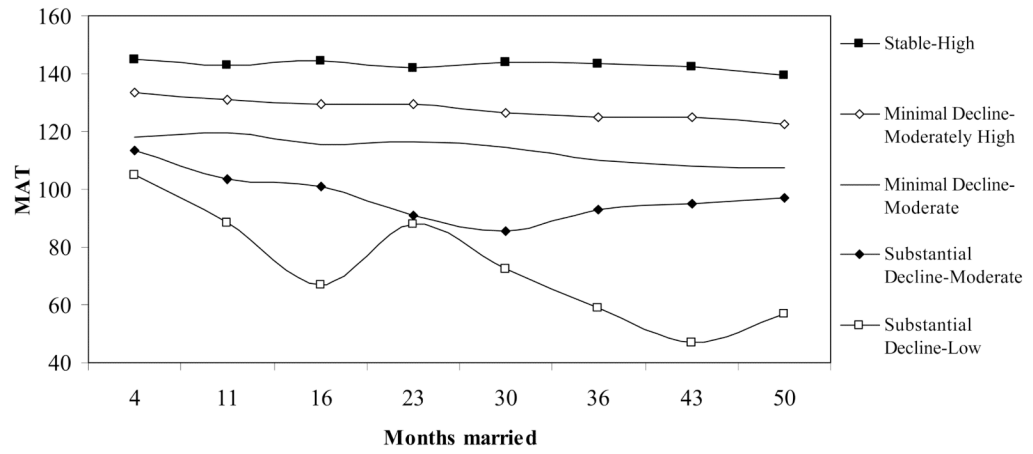
**Figure 1.**  
Husbands' Marital Satisfaction Trajectories



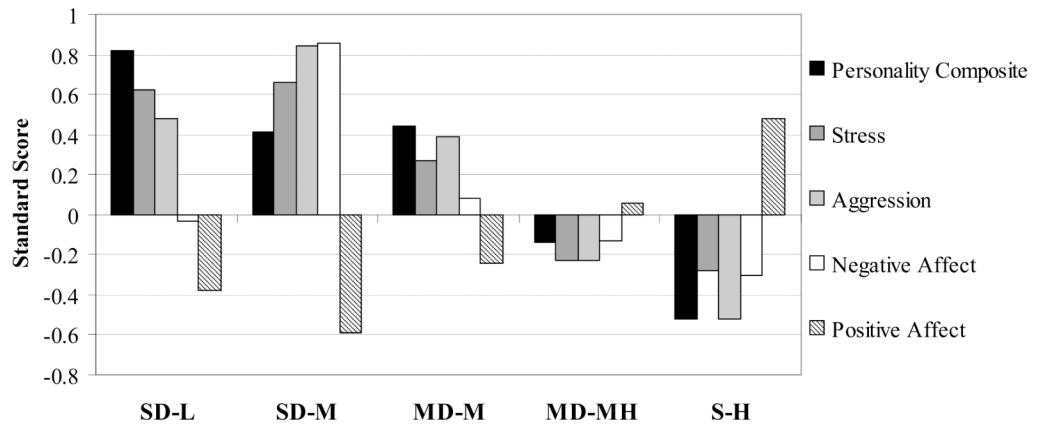


**Figure 2. Personality, Stress, Aggression, and Positive Affect Distinguish Husbands' Trajectory Groups**

*Note:* Negative affect does not distinguish among husbands' trajectory groups.



**Figure 3.**  
Wives' Marital Satisfaction Trajectories



**Figure 4.** Personality, Stress, Aggression, Negative Affect, and Positive Affect Distinguish Wives' Trajectory Groups

**Table 1**  
**Correlations Between Personality, Stress, and Adaptive Process Variables (N = 344 spouses)**

	1	2	3	4	5	6	7	8
<i>Husbands (n = 172)</i>								
1. Neuroticism	—							
2. Trait anger	0.57**	—						
3. Self-esteem	-0.48**	-0.16*	—					
4. Personality composite	0.88**	0.74**	-0.71**	—				
5. Chronic stress	0.35**	0.26**	-0.13	0.34**	—			
6. Aggression	0.31**	0.31**	-0.05	0.30**	0.18*	—		
7. Negative affect (joint)	0.11	0.09	-0.01	0.10	0.08	0.28**	—	
8. Positive affect (joint)	-0.05	-0.21**	-0.13	-0.09	-0.03	-0.15	-0.24**	—
<i>Wives (n = 172)</i>								
1. Neuroticism	—							
2. Trait anger	0.67**	—						
3. Self-esteem	-0.50**	-0.43**	—					
4. Personality composite	0.87**	0.84**	-0.77**	—				
5. Chronic stress	0.29**	0.23**	-0.32**	0.34**	—			
6. Aggression	0.28**	0.34**	-0.20*	0.33**	0.28**	—		
7. Negative affect (joint)	0.08	0.17*	-0.08	0.13	0.11	0.34**	—	
8. Positive affect (joint)	-0.13	-0.20*	0.17*	-0.20**	-0.09	-0.27**	-0.24**	—

*Note:* We calculated correlations between variables separately for husbands and wives. The personality composite is an aggregate index formed by normalizing and combining individuals' scores on neuroticism, trait anger, and self-esteem.

\*  $p < .05$ .

\*\*  $p < .01$ .

**Table 2**  
**Satisfaction Trajectory Parameter Estimates (N = 464 spouses)**

Group	%	n	Parameter Estimates		
			Intercept	Linear	Quadratic
<i>Husbands (n = 232)</i>					
Substantial decline–low (SD–L)	6.37	15	93.67	-1.14	
Substantial decline–moderate (SD–M)	12.72	29	124.98	-1.61	0.01
Minimal decline–moderate (MD–M)	32.38	74	117.20	-0.11	
Minimal decline–moderately high (MD–MH)	35.65	88	135.22	-0.44	
Stable–high (S–H)	12.88	26	143.91		
<i>Wives (n = 232)</i>					
Substantial decline–low (SD–L)	6.07	13	109.44	-2.02	
Substantial decline–moderate (SD–M)	12.44	29	119.06	-1.68	0.02
Minimal decline–moderate (MD–M)	28.04	66	122.34	-0.29	
Minimal decline–moderately high (MD–MH)	33.39	77	133.52	-0.22	
Stable–high (S–H)	20.06	47	142.76		

*Note:* All parameter estimates significant at  $p < .01$ .



**Table 3**  
**Husband–Wife Cross-Tabulations and Divorce Rates (N = 232 couples and N = 172 couples)**

Wife's Group	Husband's Group						Total
	SD-L	SD-M	MD-M	MD-MH	S-H		
4-year divorce rates (N = 232 couples)							
Substantial decline–low (SD–L)	4 (50%)	8 (50%)	1 (100%)	0	0		<b>54%</b>
Substantial decline–moderate (SD–M)	9 (38%)	5 (20%)	11 (27%)	4 (0%)	0		<b>25%</b>
Minimal decline–moderate (MD–M)	2 (0%)	15 (27%)	27 (15%)	19 (6%)	3 (0%)		<b>14%</b>
Minimal decline–moderately high (MD–MH)	0	1 (0%)	27 (0%)	42 (5%)	7 (0%)		<b>3%</b>
Stable–high (S-H)	0	0	8 (0%)	23 (4%)	16 (6%)		<b>4%</b>
Total	<b>36%</b>	<b>31%</b>	<b>11%</b>	<b>5%</b>	<b>4%</b>		
10-year divorce rates (N = 172 couples)							
Substantial decline–low (SD–L)	2 (50%)	3 (67%)	0	0	0		<b>60%</b>
Substantial decline–moderate (SD–M)	6 (67%)	3 (67%)	9 (67%)	3 (0%)	0		<b>57%</b>
Minimal decline–moderate (MD–M)	1 (0%)	8 (25%)	14 (21%)	13 (23%)	2 (0%)		<b>21%</b>
Minimal decline–moderately high (MD–MH)	0	1 (0%)	25 (16%)	35 (14%)	7 (14%)		<b>15%</b>
Stable–high (S-H)	0	0	5 (20%)	22 (14%)	13 (8%)		<b>13%</b>
Total	<b>56%</b>	<b>40%</b>	<b>26%</b>	<b>15%</b>	<b>9%</b>		

Note: Cell numbers represent the number of cross-tabulated group members. Numbers in parentheses represent the percent of cross-tabulated group members who divorced. Bolded numbers represent the total divorce rate by trajectory group.

**Table 4**  
**Personality Characteristics, Stress, and Adaptive Processes Distinguish Among Husbands' and Wives' Trajectory Groups (N = 344 spouses)**

Group	Characteristics					
	Personality	Stress	Aggression	Negative Affect	Positive Affect	
<i>Husbands (n = 172)</i>						
Substantial decline–low	0.94	0.89	0.96	0.33	–0.52	
Substantial decline–moderate	0.33	0.28	0.03	0.30	–0.39	
Minimal decline–moderate	0.33	0.16	0.30	0.17	–0.20	
Minimal decline–moderately high	–0.27	–0.21	–0.35	–0.20	0.09	
Stable–high	–0.55	–0.22	0.03	–0.08	0.66	
<i>F</i> value	7.71 <sup>***</sup>	3.75 <sup>**</sup>	6.23 <sup>***</sup>	1.78	4.57 <sup>**</sup>	
<i>r</i> <sup>2</sup>	0.16	0.08	0.13	0.04	0.10	
<i>Wives (n = 172)</i>						
Substantial decline–low	0.82	0.62	0.48	–0.03	–0.38	
Substantial decline–moderate	0.41	0.66	0.84	0.86	–0.59	
Minimal decline–moderate	0.44	0.27	0.39	0.08	–0.24	
Minimal decline–moderately high	–0.14	–0.23	–0.23	–0.13	0.06	
Stable–high	–0.52	–0.28	–0.52	–0.30	0.48	
<i>F</i> value	7.49 <sup>***</sup>	5.62 <sup>***</sup>	10.97 <sup>***</sup>	5.68 <sup>***</sup>	5.50 <sup>***</sup>	
<i>r</i> <sup>2</sup>	0.16	0.12	0.21	0.12	0.12	

Note: Cell values represent *z*-scores normed by sex.

\*  $p < .05$ .

\*\*  $p < .01$ .

\*\*\*  $p < .001$ .