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As Good as it Gets? A Life Course Perspective on Marital Quality

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Abstract

Marital relationships, like individuals, follow a developmental trajectory over time with ups and downs and gains and losses. We work from a life course perspective and use growth curve analysis to look at trajectories of change in marital quality over time. Although the tendency is for marital quality to decline over time, some groups begin with much higher levels of marital quality than others. Moreover, a number of life course and contextual factors can accelerate or slow this path of change. Our findings point to the importance of considering the multi-dimensionality of time (e.g., age, marital duration, the passage of years) as well as family transitions (e.g., having children, emptying or refilling the nest) in creating the meanings and experiences of marriage over time.

The life course perspective has become increasingly central to sociological research in the past 15 years (Elder, Johnson and Crosnoe 2002). Elder and O'Rand describe this theoretical perspective as: "temporal and contextual in locating people in history through birth years and in the life course through the social meanings of age-graded events and activities" (1995:454). This view recognizes the importance of social contexts and social transitions as well as the timing of those transitions in the life course.

Marital quality has long been viewed by sociologists as an important feature of the adult life course. Indeed, marital quality is positively associated with both mental and physical health (Wickrama et al. 1997; Kiecolt-Glaser et al. 1987). As early as the 1950s, sociologists concluded that marital quality diminishes following the birth of the first child and does not begin to improve until children leave the parental home. As recently as 1990, Norval Glenn

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[1]The ACL T1 survey asked date of marriage only for first marriages. In cases where this information was not available (i.e., the respondent was in a second or later marriage), information was obtained from Time 2 for those who were married to the same spouse between T1 and T2 (but who were not in their first marriage). Where information was missing on month of marriage, the month of June (the midpoint) was assigned. Where information on year of marriage was missing (N = 2), we used regression models to impute missing data.

concluded that "a curvilinear relationship between family stage and some aspects of marital quality is about as close to being certain as anything is in the social sciences" (823). This conclusion reflects a kind of life course assessment, however it is seriously limited because it is based on findings from cross-sectional data. Marriages of poorer quality may be removed from the population as divorces occur, leaving only marriages of higher quality among individuals of older ages (Glenn 1990, 1998). As a result, it only appears that marriages improve in later life because many of the "worst" marriages are no longer intact by later life.

Life course research has enjoyed a renaissance, in part because collection of longitudinal data and new statistical techniques make it possible to more adequately assess change over the life course (Elder, Johnson and Crosnoe 2002). Much of the best recent research on marital quality starts with newlywed couples and follows them over time. (See examples in Bradbury, Cohan and Karney 1998.) This approach deals with selection bias due to divorce (but not selection into marriage) and allows researchers to observe the onset of marital dysfunction. However, these samples are primarily comprised of young, newly married individuals so we end up with knowledge about the early years of marriage among young people. It is just as important to consider those who have been married for much longer periods of time. Stress research shows that chronic strains may be more detrimental to health and well-being than are life events (Aneshensel 1992), so long-term marital dysfunction is probably at least as important as the onset of marital dysfunction. In an important recent study, VanLaningham, Johnson and Amato conducted a longitudinal analysis (over 17 years) of individuals aged 55 and older and found "declines in marital happiness at all marital durations and no support for an upturn in marital happiness in the later years" (2001:1313). (See also Johnson, Amoloza and Booth 1992; Valliant and Vailliant 1993.)

Although recent research has made great strides, a number of important questions about marital quality change remain unanswered. Recent longitudinal studies focus on marital duration and change over time but omit age from their analyses (Johnson, Amoloza and Booth. 1992; VanLaningham, Johnson and Amato 2001). Moreover, while they may include parental status as a control variable, they do not consider how the effects of age and marital duration on marital quality may depend on parental status and parenting transitions. Yet the life course perspective emphasizes that the various components of social context and time will interact with one another and that individual trajectories of change will be punctuated by key life transitions (Elder 1994; George 1996). If we want to understand life course change, we must determine if change in marital quality depends primarily on age, marital duration, parental status or some combination of these life course variables.

Background

Marital Quality as a Trajectory

Marital relationships, like individuals, are not static over time; rather, they follow a developmental trajectory. This dynamic trajectory is often assumed in research and theory on marital relationships, yet it is rarely examined empirically. Linda George argues that "most research informed by life course perspectives examines transitions rather than trajectories" (1996:250). In the present study, growth curve analysis allows us to examine the developmental trajectories of marital relationships over time and for different groups (e.g., men and women, African Americans and Whites). In addition, we are able to examine how relationship trajectories are structured by the individual life course, in the form of life course position (e.g., age, family roles and marital duration) as well as family transitions (e.g., birth of child and empty nest).

Life Course Position: Age and Marital Duration

Age and marital duration may be correlated, but, conceptually, they indicate distinctive life course processes. A focus on age presumes developmental change in marital quality that comes with increasing personal experience or maturation. For example, Carstenson, Levenson and Gottman (1995) argue that individuals become less emotionally reactive as they age and that this is positive for marriages. In contrast, a focus on marital duration presumes that change occurs as a result of increasing time spent in the married status, perhaps as a result of diminished compatibility or boredom (VanLaningham, Johnson and Amato 2001).

A longitudinal analysis of marital quality that focuses exclusively on marital duration and excludes age from the analysis may conflate the effects of developmental change with the effects of other life course processes. Some studies find that age is positively associated with marital quality (Brubaker 1990; Levenson, Carstenson and Gottman 1993), suggesting that marital quality might improve with age. We are aware of no longitudinal studies that simultaneously consider the effects of age, marital duration and other life course variables on change in marital quality over time. Based on previous research, we hypothesize that marital duration will be inversely associated with marital quality (presumably reflecting boredom, diminished compatibility, etc.) while age will be positively associated with marital quality (presumably reflecting maturation and adult development). Previous work does not clearly suggest whether marital duration or age should predominate in predicting marital quality change and we will explore this issue in our analysis.

The effects of marital duration and age may also depend on one another. For example, the effect of a five-year marital duration may be quite different for a 25 year old and a 50 year old. The 25 year old probably had many fewer social and financial resources at the time of marriage and almost certainly had less personal experience and maturity. These factors may affect the starting point for marital quality as well as the amount and rate of change in marital quality over time. We hypothesize that the negative effect of marital duration on marital quality will be greater at younger ages.

Life Course Position: Parental Status and Parenting Transitions

One of the most important contextual features of a marriage is parental status. Previous research suggests that living with minor children is detrimental to marital quality (Kurdek 1999), in part because children impose additional household and childcare duties on couples and interfere with the quantity and quality of time that couples spend together (Helms-Erickson 2001). Moreover, the interaction of parenting and work strains can undermine marital quality (Spain and Bianchi 1996).

Research on marital quality and living with adult children generally yields few significant effects (e.g., Ward and Spitze 1998). On the other hand, living independently from adult children may be beneficial to the parent's marriage (Umberson and Gove 1989), perhaps by allowing them to spend more quality time as a couple. VanLaningham, Johnson and Amato (2001) report that parental status variables (analyzed as control variables) reduce but do not eliminate the general decline in marital happiness associated with increasing marital duration. However, their study does not address whether the effects of marital duration on marital quality depend on one's parental status.

We hypothesize that living with minor or adult children will adversely affect baseline levels of marital quality as well as change in marital quality over time. Moreover, younger parents and parents of shorter marital durations may have fewer personal and social resources to cope with the demands of parenting young children. Thus, we hypothesize that the adverse effects of minor children on marital quality will be greater at younger ages and shorter

marital durations of parents. Similarly, we hypothesize that having adult children in the home may interfere more with the marital quality of younger parents who might benefit most from the exit of their adult children. In contrast, research indicates that older children who are self-sufficient are often valuable resources to parents, especially in the later years of parents' lives (Hogan and Eggebeen 1995). Thus, we expect that having older children living outside the home will be positively associated with marital quality, especially for older adults.

A life course perspective also emphasizes the importance of parenting *transitions* (Helms-Erickson 2001; Setterson and Mayer 1997). For example, becoming a parent or an empty nester may trigger a turning point in the trajectory of marital quality over time (Helms-Erickson 2001; White and Edwards 1990). Previous cross-sectional studies suggest that becoming a parent is stressful for marriage (e.g., Orbuch et al. 1996); however, some longitudinal studies of newlyweds suggest that marital quality may decline in the early years of marriage whether or not one has a child (McHale and Huston 1985; White and Booth 1985; for an exception, see Kurdek 1999). We hypothesize that the transition to parenting (or adding a new child to a family) will trigger a downturn in marital quality, and we will assess whether this effect is lasting in the years following the transition.

Parental status transitions are not as closely tied to age and marital duration as in the past (George 1993). For example, more people now elect to remain childless throughout life or to postpone parenthood until mid-life. Based on the assumption that personal and social resources tend to accumulate with time, we hypothesize that the transition to parenting will have stronger adverse effects on the marital quality of younger adults and adults with shorter marital durations. We hypothesize that emptying the nest will trigger a positive turning point in marital quality trajectories for adults and that this positive effect will be greater for younger parents.

Marital Quality Change and the Present Study

Many longitudinal studies of marital quality examine *change scores* to indicate how much change in marital quality occurs between two points in time. While change scores can be used to address important research questions, they are limited because equal amounts of change in marital quality for different individuals cannot be interpreted in the same way (Bradbury, Cohan and Karney 1998; Karney and Bradbury 1995). For example, each individual starts the study with a different level of marital quality and follows a different path of change. A 20 percent drop in marital quality may carry very different meaning for someone who started with an extremely happy marriage and ended up with a happy marriage than for someone who started with a below average marriage and ended up in a divorce-prone marriage. Moreover, we might find that the rate of change is much faster for some groups than others or at different points in the life course. For example, the decline in marital quality might be most rapid in the first years of marriage.

In the present study, we use growth curve analysis to test the following hypotheses: (1) Initial levels and change in marital quality over time are: (a) positively associated with age, (b) negatively associated with marital duration, especially for younger adults, (c) negatively associated with living with minor or adult children, especially for younger adults and those of shorter marital durations, and positively associated with having adult children living on their own, especially for older adults. (2) The transition of adding a new child to the family will trigger a downturn in marital quality, and emptying the nest will trigger an upturn in marital quality, especially for younger adults and those in marriages of shorter duration.

Data and Methods

Data

Our data are from a national three-wave panel survey of individuals in the contiguous United States (Americans' Changing Lives Surveys or ACL; House 1986). The original sample (ages 24–96) was obtained using multi-stage, stratified area probability sampling with an oversample of African-Americans and persons over 59 years of age. Face-to-face interviews lasting approximately 90 minutes each were conducted with individuals in 1986 (N = 3,617), 1989 (N = 2,867) and 1994 (N = 2,398).

We examine 1,059 individuals who were continuously married across the three waves of data collection and who are either non-Hispanic White or African American. Too few cases were available to allow other racial/ethnic comparisons. Missing data on age of child or on marital quality reduced the sample to 1,011 for the analysis of Positive Marital Experience and 1,000 for the analysis of Negative Marital Experience. In our married sample, 182 individuals were previously divorced and are in a subsequent marriage (described further below). However, we restrict our analysis to individuals who were continuously married over the eight-year study period in order to have marital quality data at all three time points for all respondents. Those who divorced over the study period (N = 112) reported lower levels of marital quality at Time 1 than did those who did not divorce over the study period. Our main focus in the present study is to gauge how marital quality changes over an eight-year period for those who remain married for this period of time.

Measures

Marital Quality

Measures of marital quality vary across studies but most scholars now emphasize that marital quality is multi-dimensional (Glenn, 1990). Because growth curve analysis requires at least three waves of data, we were constrained by our data in that only six marital quality items were included in all three waves of the ACL data collection. Using several approaches (e.g., using different numbers of factors with different rotation methods or different samples), we examined various marital quality factors. Generally, the factor analyses reveal two latent constructs which we call Positive Marital Experience and Negative Marital Experience. Scales were created so that higher values indicate higher levels for the intended construct. To ensure that change over time reflects growth rather than change in the measurement scale, the scales for each indicator at each wave of measurement are standardized using the T1 mean and standard deviation (Bryk and Raudenbush 1987). To help ensure the comparability of the latent constructs of marital quality over time, the factor loadings are constrained to be equal across waves. Furthermore, to ensure that the latent construct of marital quality is the same from model to model, the same sets of estimated parameter coefficients for the measurement model from the model without covariates are used for further analyses with covariates. Factor loadings (all statistically significant) from the model without covariates are given below in parentheses.

Positive Marital Experience is a latent variable composed of four items: (1) "How satisfied are you with your marriage?" (responses from 1–5, "not at all satisfied" to "completely satisfied") (factor loading = 1.000); (2) "How much does your (husband/wife) make you feel loved and cared for?" (responses from 1–5, "not at all" to "a great deal") (factor loading = 1.178); (3) "How much is (he/she) willing to listen when you need to talk about your worries or problems?" (responses from 1–5, "not at all" to "a great deal") (factor loading = 1.178); and (4) whether or not one's spouse is a person with whom one can really share private feelings and concerns (0 = no, 1 = yes) (factor loading = .456). The factor determinacy

coefficients that indicate the quality of the factor score estimates (Muthén and Muthén 1998) are .919, .930 and .930 for T1, T2 and T3 positive experience, respectively.

Negative Marital Experience is a latent variable measured with two items: (1) "How often do you feel bothered or upset by your marriage?" (responses from 1–5, "never" to "almost always") (factor loading = 1.000) and (2) "How often would you say the two of you typically have unpleasant disagreements or conflicts?" (responses from 1–7, "never" to "almost daily" (factor loading = 1.557). The factor determinacy coefficients are .817, .778 and .815 for T1, T2 and T3 negative experience, respectively.

Life Course Position

We analyze life course position as a function of age, marital duration and parental status. A squared term for age is also included to account for potential non-linear effects of age. Marital duration is measured by subtracting respondents' date of marriage (month and year) from respondents' interview date (month and year).i We initially included a squared term for marital duration but this effect was not significant and dropped from analyses. Parental status, which is measured at baseline, is measured with five dummy variables: (1) minor child (less than 18) at home; (2) adult child (18 or older) at home; (3) adult child (18 or older) living away from home; (4) minor child away from home; and (5) childless (as the reference group). We distinguish children 18 and younger from other children for three reasons. First, while preschoolers require more hands-on parenting, parents who live with minor children of any age face daily responsibilities and challenges that non-parents and parents of adult children do not have to contend with. Second, previous research finds that parenting of preschool and older minor children has similar effects on the well-being of adults (Umberson and Gove 1989). Third, there is more age variation in the group of "minor child at home" giving us a more effective basis for testing the interaction of age with the different parental status categories.

We consider parental status transitions between 1986 and 1989 with three dummy variables including: (1) the transition to a new child at home (1= experienced the birth or adoption of a child), (2) the transition to empty nest (1 = any child in the home in 1986 and only adult children living away from the home in 1989), and (3) the return of an adult child to the home (1 = adult children living away from the home in 1986 and adult child living in the home in 1989). The reference category for the parental status transitions consists of those who did not experience any of the above transitions between 1986 and 1989.

The net effects of age and marital duration are difficult to disentangle due to the dependence of marital duration on age. That is, we generally observe higher values of marital duration for older individuals. Introducing age at marriage and spouse's age at marriage as an additional control make it possible to better gauge the independent effects of age and marital duration. Previous research finds that age at marriage is positively associated with marital stability (Morgan and Rindfuss 1985; South and Spitze 1986) and inversely associated with risk for divorce (Thornton and Rodgers 1987). We include respondent's age, respondent and spouse's age at marriage and marital duration in our multivariate models.

Sociodemographic Variables

All models are adjusted for the effects of several sociodemographic characteristics that may be associated with marital quality. They include gender (0 = female, 1 = male), race (0 = non-Hispanic whites, 1 = African Americans), education (number of years completed) and total family income ($10,000s) in 1986. Table 1 presents means and standard deviations for all variables. Please note that for ease of interpretation, age, marital duration and husband's and wife's ages at marriage are measured in single years, and household income is measured

in single dollars in Table 1. In all subsequent models, age, marital duration and age at marriage are measured in 10-year increments in order to facilitate interpretation in our multivariate models.

Analytical Design

Growth Curve Analysis

We use latent linear growth models to assess the effects of independent variables on the initial level and change in marital quality constructs. Thus, our models not only account for the effects of independent variables on the conditional mean levels of marital quality, but also account for effects on the rate of change in marital quality over time. Our statistical models combine features of factor analytic and latent growth curve models into a single model referred to as a *multiple indicator linear growth model* (Muthén and Muthén 2000:219). A measurement model relates a vector of observed indicators to a wave-specific latent marital quality factor. Each latent marital quality factor is modeled as a linear function of latent growth parameters, resulting in a linear growth curve model with a latent intercept representing the level of the factor at time 0 and a latent slope describing latent factor change as a function of time. The growth parameters can be viewed as time-invariant random variables that vary by individuals and depend on a set of fixed and time-varying covariates. Structural parameters from this part of the model provide the basis for assessing effects of key variables on level and change in marital quality. In addition to the structural parameters, this model yields estimated variances in latent growth parameters to capture the extent to which latent slopes and intercepts vary across subjects, as well as the estimated covariance between growth parameters, which measures the degree of dependence between initial levels of marital quality and change over time.

Selection Effects

Since marriages of poorer quality may be removed from the married population as divorces occur, non-random selectivity may lead to biased estimates of the effects of independent variables on marital quality when related variables are not controlled – an omitted variable problem. Commonly, Heckman's (1979) two-stage sample selection bias correction approach is used to deal with the problem. However, the variables that are likely to cause biased estimates of effects of independent variables if they are omitted in the models (e.g., age, age at marriage and marital duration) are included in our models. In an additional effort to address the propensity to divorce as a factor influencing marital quality, we include a control variable for ever-divorced (1 = previously divorced; 0 = not previously divorced).

Results

Results from growth curve models with no covariates indicate that marital quality changes over the eight-year study period, and this change is in the direction of diminishing marital quality over time. Positive marital experiences generally decreased over the eight-year period ($b = -.011$; $p < .001$), and negative marital experiences increased ($b = .017$; $p < .001$). We also find evidence of variation in the random intercept for both measures (var(*I*PI) = .434 and var(*I*NI = .224, $p < .001$) with modest variation in random slopes (var(*S*PI) = .002 and var(*S*NI) = .001, $p < .05$). The covariance parameters are statistically 0 and therefore provide no evidence of dependence in growth parameters (i.e., that changes in positive or negative experiences occur at a faster, or slower, rate for individuals that are high, or low, on initial marital quality).

Main Effects of Life Course Position on Positive Marital Experience

Table 2 presents the main effects of life course variables on the initial level (the latent intercept, Panel A) of positive marital experiences and the rate of change in positive experiences (the latent slope, Panel B) over time. The means of the growth parameters reflect level and change in positive experience after controlling for covariate effects. The constant term for the latent slope suggests that, once covariates are taken into account, the decline in positive experience over the study period is no longer statistically significant. We will see below how the covariates are associated with positive marital experiences over time.

We begin our discussion by examining how covariates are associated with *initial* levels of positive marital experience (see Panel A). These effects (effects on the latent intercept) follow the standard interpretation in regression models insofar as a unit increase in the value of a covariate yields a positive or negative change in the level of the outcome. Panel A shows that age is non-linearly associated with positive marital experience at the beginning of the study period. We find that initial levels of positive experience do not vary much with age up to about the mid-30s when older age becomes associated with increasingly higher levels of positive experience. In this model, controlling for marital duration (which is not significantly associated with initial levels of positive marital experience), age is positively associated with positive marital experience after the mid-30s, suggesting the possibility of developmental change with age.

Panel A also shows that those who had adult children living in the home began the study period with lower levels of positive marital experience. This suggests that living with adult children may impose some strain on the parents' marriage or that living with adult children interferes with positive interactions between parents. The variance in the latent intercept shows that after controlling for life course and demographic variables, there remains significant variation in initial levels of positive marital experience (var(I) = .391, $p < .001$).

We now turn to Panel B of Table 2 to see the results for the *rate* of change in positive experience over time. The covariate effects on the latent slope provide information about the extent to which key variables alter the trajectory of decline in positive experience over time. Positive effects slow the rate of decline while negative effects increase the rate of decline in positive marital experience. Panel B shows that the rate of change in positive marital experience over time is similar at different ages and marital durations and for those of different parental statuses. These findings suggest that life course position does not serve to slow or to accelerate the general decline in positive marital experience that occurs over time. Modest variation in the latent slope remains after controlling for covariates. The covariance between the latent slope and intercept is statistically 0, indicating that level of positive experience is independent of change in positive experience.

Main Effects of Life Course Position on Negative Marital Experience

Panels C and D of Table 2 report the growth curve results for the main effects of life course variables on negative marital experience. These results show that older people begin the study period with lower levels of negative marital experience and that, controlling for age, marital duration is not significantly associated with initial levels of negative marital experience. Those with minor children living in a separate residence begin the study period with lower levels of negative marital experience.

Covariate effects on the rate of change in negative experience over time are reported in Panel D. We do not find any significant effects of age or marital duration on the rate of change in negative marital experience over time. However, Panel D suggests that having a minor child living in a separate residence accelerates the rate of increase in negative experience over time. We compared the childless to those respondents who have minor

children living elsewhere and find that the childless begin the study period with higher levels of negative experience. However, compared to respondents with minor children living elsewhere, the childless are characterized by a flatter rate of increase in negative experience over time. Those with minor children living elsewhere exhibit lower initial levels of negative experience but exhibit a steeper rate of increase in negative experience over the study period. This results in a pattern of increasing convergence of the two groups over time so that the childless and those with minor children in a separate residence are fairly similar in levels of negative marital experience by the end of the study period.

The variance in the latent intercept for negative experience is significant when controlling for life course and sociodemographic variables. Similar to positive experiences, the covariance between the latent slope and intercept is 0. Thus, we find no evidence that rates of change in negative experience differ by levels of negative experience.

Panel D also suggests that adding a new child into the household affects the rate of change in negative experience over time. Figure 1 illustrates the trajectory of change for respondents who made none of the major parental transitions considered in this study compared to those adults who experience the introduction of a new child into the household between 1986 and 1989. Because parental status transitions that occur between 1986 and 1989 do not affect initial 1986 levels of marital quality (i.e., the intercept), our model constrains the intercept for marital quality to be equal across parental status transition categories. Thus, Figure 1 indicates that, although the two groups begin the study with similar levels of negative marital experience, they increasingly diverge with time so that those who have a new child end the study period with higher levels of negative marital experience than do those who do not go through this transition. This finding supports the notion that having children is stressful for married couples.

In sum, the main effect models provide partial support for Hypotheses 1a and 1c and no support for Hypothesis 1b. Age is generally associated with higher initial levels of marital quality, and living with adult children is associated with lower initial levels of positive experience. However, marital duration is not significantly associated with initial levels of change in marital quality, and before considering potential interactive effects, no life course variables significantly alter the rate of change in marital quality over time.

Interactions Between Life Course Variables

Table 3 shows the results from growth curve models that tested interactions between the life course variables in predicting initial levels and rate of change in marital quality. Panel A shows that none of the life course variables interact with one another to predict initial levels of positive marital interaction. However, Panel B shows that the effect of age on the rate of change in positive experience diverges for those who have an adult child living in a separate residence. To illustrate the pattern of effects, we estimated trajectories of positive marital experience over the eight-year study period for three age groups (ages 40, 55 and 70), for those who lived separately from their adult children in 1986, and for their childless counterparts (controlling for the other life course and socio-demographic characteristics). These trajectories, shown in Figure 2, suggest that older individuals begin the study period with higher levels of positive marital experience than do younger individuals. However, over time, parental status influences the trajectory of change in positive marital experience. Among 70 year olds, those with adult children living in a separate residence exhibit a fairly stable pattern of positive experience over time. Yet their childless peers exhibit a rather steep decline in positive experience over the same period, so the childless and parents of adult children living independently increasingly diverge with time.

Among 55 year olds, we see a similar pattern except that the two parental status groups diverge to a smaller degree over time. Among 40 year olds, we see the opposite pattern so that the childless and parents of independent adult children increasingly diverge in positive marital experience over time, but it is the parents of adult children who exhibit the greater decline in positive experience over time, while the childless are largely stable in positive experience over time. In sum, in support of Hypothesis 1c, it appears that having an adult child (living independently) may facilitate positive marital experiences of parents but only with the advancing age of the parents. This pattern also suggests that having children (and, as a consequence, completing childbearing) at very young ages may have enduring negative consequences for marital quality.

Panels C and D of Table 3 report the life course interaction results for negative marital experience. Panel C reveals a significant interaction of age and living with a minor child in predicting initial levels of negative experience. Living with a minor child is associated with higher initial levels of negative experience for younger than for older parents. This finding provides support for Hypothesis 1c and fits with the notion that older parents have more resources that may ease the strains of parenting young children.

Panel D shows significant effects of the transition to a new child in the home and of the empty nest transition on the rate of change in negative experience. As shown in Table 2, the transition to a new child in the household accelerates the rate of increase in negative experience over time. In contrast, the empty nest transition slows the rate of increase in negative experience over time. These findings provide support for Hypothesis 2 and fit with previous research suggesting that having a child is stressful for parents (Orbuch et al. 1996), that emptying the nest may reduce strains for parents (White and Edwards 1990).

We find only one significant interaction (in Panel D) between life course variables in predicting the rate of change in negative experience. The interaction between age and having an adult child living in a separate residence in predicting the rate of change in negative marital interaction is significant. We illustrate these parental status effects by plotting trajectories of change in negative marital experience for three age groups (ages 40, 55 and 70) and two parental status groups in Figure 3.

Figure 3 shows trajectories by age for the childless and those with adult children living separately from parents. Among 40 year olds, both the childless and those with adult children away cluster fairly closely together with both groups exhibiting an increase in negative experience over time. Among 55 year olds, both the childless and those with adult children away begin the study with about the same levels of negative experience, but they increasingly diverge with time so that the childless are much higher on negative experiences than are those with adult children away by the end of the study period. The same pattern is observed for 70 year olds, but the rate at which the two groups diverge is even greater. Consistent with Hypothesis 1c, these findings suggest that those respondents with adult children living independently experience less of an increase in negative marital experience over time and this trend is greater at older ages. As parents age, adult children may begin to play a greater supportive role by reducing stress for aging parents or even directly facilitating interactions between parents in ways that might benefit the marital quality of the parents.

Marital Quality Over the Life Course

We find that marital quality tends to decline over time, corroborating recent longitudinal research on marital quality change (e.g., VanLaningham, Johnson and Amato 2001). We add to this unhappy trend, results showing that negative marital experience tends to increase while positive marital experience tends to diminish over time. Yet we also find that some

groups begin with higher levels of marital quality than others, so the decline over time has a different meaning for different groups. In addition, a number of life course factors may serve to accelerate or slow the rate of decline in marital quality over time.

Our study provides the first evidence that age is more strongly and consistently associated with marital quality than is marital duration. This suggests to us that more emphasis should be placed on developmental change in marital quality that may occur as individuals age. For example, Carstenson, Levenson and Gottman (1995) argue that individuals become less emotionally reactive to conflict and marital difficulties as they age and that this is beneficial to marital quality. Perhaps our standards for evaluating partners also mellow with age, or perhaps we become more appreciative of our partner's positive traits and less focused on negative traits. It may be that the collective history of a couple is an asset that accrues value with time – and perhaps this collective history is strongly influenced by whether or not individuals have parented together.

We find that age is positively associated with marital quality at the beginning of our study period. Age is also associated with trajectories of change, but the nature of this trajectory depends heavily on parental status and parenting transitions. This suggests that parenting shapes the context of marriage over the life course in ways that have consequences for marital quality. While the findings are complex, they suggest that parenting may have more costs for marriages of younger people, more rewards later in life, and more modest effects in mid-life. Moreover, it is not simply being a parent versus not being a parent that shapes marital quality. Rather the timing of parenting and parenting transitions in the life course also play a role in shaping marital quality change. Future research and theoretical work should explore how developmental change associated with age influences marital quality as well as how contextual details, especially parenting, dovetail with developmental change.

The Life Course Framework

We emphasize the multi-dimensionality of time in creating the context and experience of marriage over the life course. "Time" is a function of the passage of years, but it is also a function of the individual's current age and marital duration. Heaton emphasizes that the individual features of time "are often interrelated" so that "effects can be misinterpreted when estimated separately" (1991:294). Previous research has made great advances in describing the ways in which marital quality changes across one dimension of time, typically marital duration. However, it is important to consider the potentially important contextual effects of parental status and parental status transitions as well as the developmental effects of biological age.

The ACL data is particularly well-suited for the purpose of assessing marital quality trajectories over the life course due to the considerable variability in ages and marital durations of the respondents. Our models exploit the richness of the data by including a broad range of explanatory variables as well as multiple indicators in addition to repeated measurements taken over three waves covering an eight-year time interval. We combine features of factor analysis and growth curve models into a single model in which latent factors provide a parsimonious specification of marital quality at each measurement occasion, and growth curve models highlight the major mechanisms generating levels and change over time in marital quality. Additional waves of data will certainly add to the quality of research based on these data. A more rigorous analysis requires marital histories overlapping many cohorts over a longer span of time. We are not aware of existing data that would meet this requirement.

The approach we use in this study does not answer all of the questions about life course effects on marital quality change nor does our statistical approach solve all the problems

associated with the complexity of the empirical questions. The present study was designed to take one additional step in the direction of clarifying our understanding of the complexities of change in marital quality over the life course.

Caveats and Future Directions

Age and Cohort Effects

We find consistent evidence that age is positively associated with marital quality even though marital quality tends to decline over time. The levels of marital quality observed in this study probably reflect, at least in part, cohort differences. Different birth (and marriage) cohorts are influenced by the historical context of their marriage experiences. For example, the timing of marriage and parenthood has changed over time as have life spans, women's employment, contraception, and the values and norms around marriage. Previous research (Rogers and Amato 2000) provides evidence of cohort effects on marital quality. Yet, while we find that older people begin the study with higher levels of marital quality, we also find that all age cohorts experience decline in marital quality over an eight-year period and that several factors (e.g., parental status, gender) can alter the trajectory of change – sometimes only for particular age groups and sometimes for the sample as a whole. Of course, we cannot disentangle age effects from cohort effects in this study that covers only an eight-year period in the life course. Future research, covering substantially longer periods of time, is needed to advance our understanding of how historical time shapes life course experiences (Elder and O'Rand 1995).

Race and Gender

The lower initial levels of marital quality reported by women and African Americans fit with the general theoretical notion that marriage is more stressful for African Americans and women than for Whites and men. Yet it appears that, while this stress may translate into lower *initial levels* of marital quality, the general *rate of decline* in marital quality over time is similar across race (at least for African Americans and Whites) and gender. In light of theoretical work on gender and race differences in life course experiences, future research should examine each of these structural indicators in relation to marital quality over the life course in much closer detail.

Pattern vs. Process

While longitudinal, survey data are well-suited to addressing patterns of change in marital quality over time, they are, of course, limited in their ability to fully address the complexity of social processes. In particular, while such data may tell us that marital quality tends to diminish over time and at a faster or slower rate at different points in the life course, they cannot tell us much about the dynamics and processes that underlie these patterns of change. Current research on marital quality reflects the rich possibilities afforded by using a range of research methodologies – including newlywed studies (Cohan and Bradbury 1997), diary studies (Almeida, Wethington and Chandler 1999), laboratory studies (Karney and Bradbury 1997), analyses of biochemical and physiological measures (Booth and Dabbs 1993; Gottman et al. 1998), and complex statistical analyses involving national longitudinal data (e.g., VanLaningham, Johnson and Amato 2001) – in helping us to understand how marital quality changes over time. We are currently conducting in-depth interviews with married couples (with a range of marital durations and ages) in an attempt to shed more light on some of the statistical patterns in marital quality change that we see in the national data. Hopefully, combining these research strategies will provide more theoretical insight into how and why marital quality changes over time – a real-life issue for many married individuals and for individuals thinking of marrying, or perhaps divorcing, their partners.

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References

Almeida, David M.; Wethington, Elaine; Chandler, Amy L. Daily transmission of tensions between marital dyads and parent-child dyads. Journal of Marriage and the Family. 1999; 61:49–61.

Aneshensel, Carol S. Social Stress: Theory and Research. Annual Review of Sociology. 1992; 18:15–38.

Booth, Alan; Dabbs, James M. Testosterone and Men's Marriages. Social Forces. 1993; 72:463–77.

Bradbury, Thomas N.; Cohan, Catherine L.; Karney, Benjamin R. Optimizing Longitudinal Research for Understanding and Preventing Marital Dysfunction. In: Bradbury, TN., editor. The Developmental Course of Marital Dysfunction. Cambridge University Press; 1998. p. 279-311.

Bryk, Anthony S.; Raudenbush, Stephen W. Application of Hierarchical Linear Models to Assessing Change. Psychological Bulletin. 1987; 101:147–158.

Carstenson LL, Levenson RW, Gottman JM. Emotional behavior in long-term marriage. Psychology and Aging. 1995; 10:140–149. [PubMed: 7779311]

Cohan, Catherine L.; Bradbury, Thomas N. Negative life events, marital interaction, and the longitudinal course of newlywed marriage. Journal of Personality and Social Psychology. 1997; 73:114–28. [PubMed: 9216080]

Elder, Glen H. Time, human agency, and social change: Perspectives on the life course. Social Psychology Quarterly. 1994; 57:4–15.

Elder, Glen H., Jr; Johnson, Monica K.; Crosnoe, Robert. The Emergence and Development of Life Course Theory. In: Mortimer, Jeylan; Shanahan, Michael, editors. Handbook of the Life Course. New York: Plenum; 2003. p. 3-22.

Elder, Glen H.; O'Rand, Angela. Adult Lives in a Changing Society. In: Cook, KS.; Fine, GA.; House, JS., editors. Sociological Perspectives on Social Psychology. Needham Heights, MA: Allyn and Bacon; 1995. p. 452-475.

George, Linda K. Sociological Perspectives on Life Transitions. Annual Review of Sociology. 1993; 19:353–373.

George, Linda K. Missing Links: The Case for a Social Psychology of the Life Course. The Gerontologist. 1996; 36:248–255. [PubMed: 8920096]

Glenn, Norval D. Quantitative Research on Marital Quality in the 1980s: A Critical Review. Journal of Marriage and the Family. 1990; 52:818–831.

Glenn, Norval D. Problems and Prospects in Longitudinal Research on Marriage: A Sociologist's Perspective. In: Bradbury, TN., editor. The Developmental Course of Marital Dysfunction. Cambridge University Press; 1998. p. 427-440.

Gottman, John M.; Coan, James; Carrere, Sybil; Swanson, Catherine. Predicting marital happiness and stability from newlywed interactions. Journal of Marriage and the Family. 1998; 60:5–22.

Heckman JJ. Sample Selection Bias as a Specification Error. Econometrica. 1979; 47:153–161.

Heaton, Tim B. Time-Related Determinants of Marital Dissolution. Journal of Marriage and the Family. 1991; 53:285–295.

Helms-Erickson, Heather. Marital Quality Ten Years After the Transition to Parenthood: Implications of the Timing of Parenthood and the Division of housework. Journal of Marriage and the Family. 2001; 63:1099–1110.

Hogan, Dennis; Eggebeen, David. Sources of Emergency Help and Routine Assistance in Old Age. Social Forces. 1995; 73:917–38.

House, James S. "Americans' Changing Lives: Wave 1." Computer File. Ann Arbor, MI: Survey Research Center; 1986.

Huston, Ted L.; McHale, Susan M.; Crouter, Ann C. When the Honeymoon is Over: Changes in the Marriage Relationship Over the First Year. In: Gilmore, R.; Duck, S., editors. The Emerging Field of Close Relationships. Hillsdale, NJ: Erlbaum; 1986. p. 109-32.

Johnson, David R.; Amoloza, Teodora O.; Booth, Alan. Stability and Developmental Change in Marital Quality: A Three-Wave Panel Analysis. Journal of Marriage and the Family. 1992; 54:582–594.

Karney, Benjamin R.; Bradbury, Thomas N. The Longitudinal Course of Marital Quality and Stability: A Review of Theory, Method, and Research. Psychological Bulletin. 1995; 118:3–34. [PubMed: 7644604]

Karney, Benjamin R.; Bradbury, Thomas N. Neuroticism, marital interaction, and the trajectory of marital satisfaction. Journal of Personality and Social Psychology. 1997; 72:1075–92. [PubMed: 9150586]

Kiecolt-Glaser, Janice K.; Fisher, Laura D.; Ogrocki, Paula; Stout, Julie C.; Speicher, Carl E.; Glaser, Ronald. Marital Quality, Marital Disruption, and Immune Function." P. sychosomatic Medicine. 1987; 49:13–34.

Kurdek, Lawrence A. The nature and predictors of the trajectory of change in marital quality for husbands and wives over the first 10 years of marriage. Developmental Psychology. 1999; 35:1283–1296. [PubMed: 10493654]

Levenson, Robert W.; Carstenson, Laura L.; Gottman, John M. Long-term marriage: Age, gender and satisfaction. Psychology and Aging. 1993; 8:301–313. [PubMed: 8323733]

McHale, Susan M.; Huston, Ted L. The effect of the transition to parenthood on the marriage relationship: A longitudinal study. Journal of Family Issues. 1985; 6:409–34. [PubMed: 12340556]

Philip, Morgan S.; Rindfuss, Ronald R. Marital Disruption: Structural and Temporal Dimensions. American Journal of Sociology. 1985; 90:1055–1077.

Muthén, Linda K.; Muthén, Bengt O. Mplus User's Guide. Los Angeles, CA: Muthén and Muthén; 2000.

Orbuch, Terri L.; House, James S.; Mero, Richard P.; Webster, Pamela S. Marital Quality Over the Life Course. Social Psychology Quarterly. 1996; 59:162–171.

Rogers, Stacy J.; Amato, Paul R. Have Changes in Gender Relations Affected Marital Quality? Social Forces. 2000; 79:731–753.

Setterson, Richard A., Jr; Mayer, Karl U. The Measurement of Age, Age Structuring and the Life Course. Annual Review of Sociology. 1997; 23:233–261.

Spain, Daphne; Bianchi, Suzanne M. Balancing Act. Russell Sage Foundation; 1996.

South, Scott; Spitze, Glenna. Determinants of Divorce Over the Marital Life Course. American Sociological Review. 1986; 51:583–590.

Thornton, Arland; Rodgers, Willard L. The Influence of Individual and Historical Time on Marital Dissolution. Demography. 1987; 24:1–22. [PubMed: 3556685]

Umberson, Debra; Gove, WR. Parenthood and Psychological Well-being: Theory, Measurement, and Stage in the Family Life Course. Journal of Family Issues. 1989; 10:440–462.

Vaillant, Caroline O.; Vaillant, George E. Is the U-Curve of Marital Satisfaction an Illusion? A 40-Year Study of Marriage. Journal of Marriage and the Family. 1993; 55:230–239.

VanLaningham, Jody; Johnson, David R.; Amato, Paul. Marital Happiness, Marital Duration, and the U-Shaped Curve: Evidence from a Five-Wave Panel Study. Social Forces. 2001; 79:1313–1341.

Ward, Russell A.; Spitze, Glenna. Sandwiched Marriages: The Implications of Child and Parent Relations for Marital Quality in Midlife. Social Forces. 1998; 77:647–666.

White, Lynn K.; Booth, Alan. The transition to parenthood and marital quality. Journal of Family Issues. 1985; 6:435–50. [PubMed: 12340557]

White, Lynn; Edwards, John N. Emptying the Nest and Parental Well-being: An Analysis of National Panel Data. American Sociological Review. 1990; 55:235–242.

Wickrama KAS, Lorenz Frederick O, Conger Rand D, Elder Glen H Jr. Marital Quality and Physical Illness: A Latent Growth Curve Analysis. Journal of Marriage and the Family. 1997; 59:143–155.

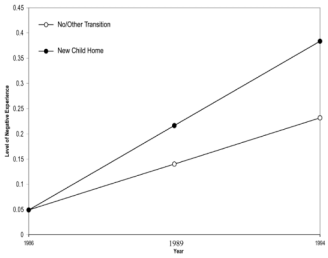

Figure 1.
Predicted Trajectories of Negative Marital Experience for Selected Parental Status Transitions from Linear Growth Curve Main Effect Model

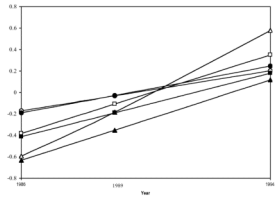

Figure 2.
Predicted Trajectories of Negative Marital Experience for Selected Parental Statuses by Age from Linear Growth Curve Life Course Interactive Model

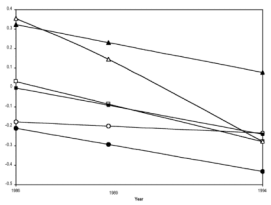

Figure 3.
Predicted Trajectories of Positive Marital Experience for Selected Parental Statuses by Age from Linear Growth Curve Life Course Interactive Model Discussion

Table 1

Means and Standard Deviations of Independent Variables (N = 1011)*

	Mean	St. Dev.
Life Course		
Marital duration (years)[a]	23.71	14.88
Age (years)[a]	49.31	14.56
Age and Living Arrangements of Children		
Minor child at home	.43	.49
Adult child at home	.16	.37
Minor child away	.03	.18
Adult child away	.56	.50
No children	.07	.26
Parental Status Transitions T1 to T2		
New child in home	.09	.28
Empty nest	.05	.22
Adult child returns home	.04	.20
Socio-demographic Characteristics		
Wife's age at marriage (years)[a]	24.67	8.53
Husband's age at marriage (years)[a]	27.52	9.25
Gender (Male = 1)	.46	.50
Race (African American = 1)	.19	.39
Education (years)	12.56	2.94
Household income (in $1,000s)[b]	35.82	24.52
Previous divorce	.18	.38

*The descriptive statistics for the sample of positive marital interaction (N = 1011) are reported here.

[a]In all subsequent analyses, this variable is measured in 10-year increments.

[b]In all subsequent analyses, this variable is measured in $10,000 increments.

Table 2

Effects of 1986 Life Course and Sociodemographic Characteristics on Marital Quality from Linear Growth Curve Models: Life Course Main Effect Model (N = 1,011/1000)

	Positive Marital Experience				Negative Marital Experience			
	A. Latent Intercept		B. Latent Slope		C. Latent Intercept		D. Latent Slope	
	Est.	S.E.	Est.	S.E.	Est.	S.E.	Est.	S.E.
1986 Life Course								
Marital duration	−.145	(.104)	.019	(.012)	.131	(.081)	−.015	(.011)
Age (in 10 years and centered at 4.93)	.140	(.101)	−.008	(.012)	−.180*	(.078)	.017	(.010)
Age Squared	.034*	(.014)	--	--	--	--	--	--
Minor child at home	−.052	(.070)	.013	(.008)	.026	(.054)	−.012	(.007)
Adult child at home	−.206**	(.067)	−.002	(.008)	.044	(.051)	.011	(.007)
Minor child away	.098	(.138)	−.005	(.016)	−.230*	(.106)	.030*	(.014)
Adult child away	−.020	(.079)	−.005	(.009)	−.043	(.059)	−.006	(.008)
Parental Status Transitions T1 to T2								
New child in home	--	--	−.007	(.010)	--	--	.019*	(.009)
Empty nest	--	--	.025	(.013)	--	--	−.018	(.011)
Adult child returns home	--	--	.024	(.014)	--	--	.012	(.012)
1986 Selected Sociodemographic Characteristics[a]								
Gender (Male = 1)	.247***	(.056)	.006	(.006)	−.023	(.043)	−.006	(.006)
Race (Black = 1)	−.215***	(.062)	−.007	(.007)	.131**	(.048)	−.008	(.007)
Means of Growth Parameters	.338	(.308)	−.068	(.035)	−.479*	(.230)	.056	(.031)
Variances in Growth Parameters	.391***	(.028)	.002*	(.001)	.203***	(.016)	.001	(.001)
R-Square	.102		.125		.091		.191	

Two-tailed tests:

* p < .05

** p < .01

*** p < .001

Standard errors in parentheses.

- indicates the parameter is not in model; @ 0 indicates the parameter is fixed at 0.

[a] Model also controls for husband's age at marriage, wife's age at marriage, T1 education, T1 household income and previous divorce.

Table 3

Effects of 1986 Life Course and Sociodemographic Characteristics on Marital Quality from Linear Growth Curve Models: Life Course Interactive Model (N = 1,011/1000)

	Positive Marital Experience				Negative Marital Experience			
	A. Latent Intercept		B. Latent Slope		C. Latent Intercept		D. Latent Slope	
	Est.	S.E.	Est.	S.E.	Est.	S.E.	Est.	S.E.
1986 Life Course								
Marital duration	−.150	(.104)	.021	(.012)	.116	(.083)	−.019	(.011)
Age (10 years-Center at 4.93)	.148	(.101)	−.021	(.013)	−.141	(.090)	.030*	(.012)
Age Squared	.026	(.014)	--	--	--	--	--	--
Minor child at home	−.055	(.070)	.012	(.009)	−.051	(.064)	−.013	(.009)
Adult child at home	−.216**	(.068)	.007	(.009)	.082	(.056)	.005	(.008)
Minor child away	.100	(.138)	.024	(.027)	.005	(.182)	−.004	(.024)
Adult child away	−.033	(.079)	−.002	(.009)	−.025	(.060)	−.008	(.008)
Parental Status Transitions T1 to T2								
New child in home	--	--	−.013	(.011)	--	--	.024**	(.009)
Empty nest	--	--	.031*	(.013)	--	--	−.022*	(.011)
Adult child returns home	--	--	.031*	(.014)	--	--	.009	(.012)
1986 Selected Sociodemographic Characteristics[a]								
Gender (Male = 1)	.245***	(.056)	.006	(.006)	−.022	(.043)	−.006	(.006)
Race (Black = 1)	−.219***	(.062)	−.006	(.007)	.127**	(.048)	−.009	(.007)
Interaction Terms								
Age* Minor child at home	--	--	−.002	(.007)	−.114*	(.049)	−.001	(.007)
Age* Adult child at home	--	--	−.008	(.007)	−.018	(.051)	.004	(.007)
Age* Minor child away	--	--	.023	(.020)	.217	(.138)	−.027	(.019)
Age* Adult child away	--	--	.020**	(.007)	−.006	(.046)	−.017**	(.006)
Means of Growth Parameters	.385	(.309)	−.089*	(.036)	−.478*	(.239)	.077*	(.032)
Variances in Growth Parameters	.390***	(.028)	.002*	(.001)	.201***	(.015)	.001	(.001)
R-Square	.100		.158		.103		.242	

Two-tailed tests:

* $p < .05$

** $p < .01$

*** $p < .001$;

Standard errors in parentheses.

- indicates the parameter is not in model; @ 0 indicates the parameter is fixed at 0.

[a] Model also controls for husband's age at marriage, wife's age at marriage, T1 education, T1 household income and previous divorce.