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Developmental Patterns in Marital Satisfaction: Another Look at Covenant Marriage

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Abstract

This study investigated differences in the trajectory of marital satisfaction in the first seven years between couples in covenant vs. standard marriages. Data on 707 Louisiana marriages from the Marriage Matters Panel Survey of Newlywed Couples, 1998 – 2004, were analyzed using multivariate longitudinal growth modeling. Restricting the sample to couples who remained married over the duration of the study, a marginal benefit of covenant status was found for husbands. This effect was largely accounted for by covenant husbands' more extensive exposure to premarital counseling. The linear decline in marital satisfaction over time that obtained for both husbands and wives was not, however, any different for covenants vs. standards. Couples characterized by more traditional attitudes toward gender roles were significantly less satisfied than others. High premarital risk factors, initial uncertainty about marrying the spouse, and the presence of preschool children in the household were all corrosive of marital satisfaction at any given time.

Keywords

covenant marriage; marital satisfaction; marital trajectories; religiosity; sex-role traditionalism; growth-curve analysis

The tenuousness of the marital bond in contemporary America has ignited the collective angst of both the research community and the larger society. Social scientists' renewed concern with the problem is reflected in recent monographs (e.g., Cherlin, 2009), as well as a recent issue of *Journal of Marriage and Family* (November, 2004), which is primarily dedicated to a symposium on the future of marriage. In the policy domain, the Deficit Reduction Act of 2005 was accompanied by a Healthy Marriage Initiative providing \$150 million each year for the promotion of marriage and fatherhood (Fincham & Beach, 2010). Religious leaders everywhere have been offering prescriptions for saving failing marriages and disseminating them to a wider audience via films, such as 2008's *Fireproof*, that play in first-run theaters. Perhaps the most ambitious reform in this vein was the creation of covenant marriage as an alternative to standard marriage in Louisiana in 1997 (Nock, Sanchez, Wilson, & Wright, 2003). A form of matrimony that is at once more difficult to enter and to exit, covenant marriage was intended to revitalize an institution weakened by

decades of hasty nuptials and easy divorce. Arkansas and Arizona quickly followed suit by adopting the same policy.

To the extent that marital endurance is the goal, covenant marriage appears to be working. Covenant couples have been found to have only a little over half the odds of divorce that standard couples exhibit (Nock, Sanchez, & Wright, 2008). However, it is well understood that marital stability, per se, does not automatically promote well-being. Rather, it is relationship satisfaction that appears to have the more prominent influence on psychological health (Rauer, Karney, Garvan, & Hou, 2008). To be trapped in an unhappy marriage is inimical to physical and mental health. And as Amato, Loomis, & Booth (1995) have shown, children of conflicted marriages fare psychologically worse in later life than those whose equally discordant parents dissolved their unions. Perhaps a more stringent test, therefore, of the power of the covenant is whether these marriages are also happier than their standard counterparts. Preliminary data suggest that this is so (Nock et al., 2008). However, given the dearth of research on this new marriage form, the issue needs further investigation.

In the current study, we compare assessments of marital quality for covenant vs. standard marriages in the first several years of marriage. Using the largest sample of covenant marriages collected to date, we also institute a number of refinements necessary for robust estimation. In particular, and unlike preliminary work, we employ a statistical model that incorporates spousal interdependence of responses into its error structure. We also replace missing data using multiple imputation in order to take full advantage of the sample information. Perhaps most importantly, and unlike earlier work, we examine how the effects of self-selection into covenant marriage, as well as differential attrition out of marriage, affect our findings.

Theoretical Background

Covenant Marriage and Marital Outcomes

We begin by briefly describing covenant marriage and reviewing the evidence for its potentially beneficial effects on marital success. Louisiana's statute mandates that couples wishing to enter into a covenant marriage participate in premarital counseling with a state-recognized secular or religious counselor. These sessions stress the seriousness of marriage, the intention of the couple that their union be lifelong, the spouses' agreement to seek marital counseling in the event of marital distress, and the restricted grounds for the dissolution of the marriage. Couples must also present a Declaration of Intent to the clerk of court. In this document, couples offer proof that said counseling was, in fact, received, affirm that marriage is for life, attest that each partner has disclosed everything that could adversely affect the decision to marry, and aver they will make all efforts to preserve the marriage—including marital counseling—in the event of a breach in the relationship. A timely divorce is then only granted for infidelity, physical or sexual abuse of a spouse or child, a felony life or death-penalty conviction, or abandonment of at least one year. In a standard marriage, spouses must live apart for six months before being granted a no-fault divorce. A similar provision in covenant marriage requires instead a two-year separation period (Nock et al., 2003).

The difficulty of egress from a covenant marriage is apparently having its intended effect. Covenant couples have been found to have only a little over half the odds of divorce of standard couples over a seven-year period (Nock et al., 2008). Preliminary investigation also uncovered a covenant advantage in marital quality over time for both husbands and wives (Nock et al., 2008). However, these analyses suffered from several limitations. Perhaps the most serious was the absence of an assessment of how unmeasured heterogeneity could have affected the findings. Additionally, husbands' and wives' equations were separately

estimated. Without the incorporation of spousal interdependence into the error structure of the model, estimated standard errors of coefficients were most likely biased. The omission of key covariates, such as premarital risk factors and the degree of counseling exposure, additionally precluded the untangling of mechanisms by which covenant status might influence marital outcomes. The current study rectifies these shortcomings.

Theories Pertinent to the Covenant-Standard Comparison

That divorce is less likely for covenant couples means that any given pool of intact marriages should contain proportionately more unhappy covenant than standard couples. Thus, one might predict that covenant marriages would be less happy—albeit more stable—than standard ones, based on this differential-attrition effect alone. On the other hand, are there particular advantages conferred by covenant status that counterbalance this phenomenon? We consider some theories of marital processes that bear on this issue.

Several studies examined the trajectory in marital quality over multiple measurement occasions. One finding that is fairly robust across a number of investigations is that marital quality, regardless how it is measured, declines over time for both genders (e.g., Glenn, 1998; Huston, Caughlin, Houts, Smith, & George, 2001; Kurdek, 2002; Umberson, Williams, Powers, Chen, & Campbell, 2005; VanLaningham, Johnson, & Amato, 2001), although the decline may be more pronounced for wives than husbands (Brennan, Barnett, & Gareis, 2001). Huston and colleagues and Kurdek describe models that purport to account for this pattern. The *enduring dynamics* model presumes that interpersonal problems brought to a relationship or developed during courtship tend to presage problems later in the marriage. The *emergent-distress* model suggests that the hostility and negative reciprocity that accompany the inevitable conflicts arising in marriage are rather what lead to declines in marital quality. And the *disillusionment* model presupposes that the idealized views of each other conjured up in courtship foster disappointment when spouses are confronted with their partners' true nature during marriage (Huston et al.; Kurdek). The vulnerability-stress-adaptation framework proposed by Lavner & Bradbury (2010) envisions comparable dynamics. A gradual erosion of marital happiness is held to be largely the product of abrasive conflict management styles in the context of pre-existing personality difficulties and stressful life circumstances.

Baumeister and Bratslavsky's (1999) passion-intimacy duality is a related theory of marital decline. Intimacy is characterized by mutual self-disclosure, a strong favorable attitude toward each other, and the communication of affection. Passion, an intoxicating mutual attraction manifested as powerful erotic desire, is defined as the first derivative of intimacy with respect to time. It develops slowly in the first stages of mutual acquaintanceship. But with the increasing self-disclosure attendant to a blossoming relationship, the rapid rise in mutual understanding and revelation of emotions generates a particularly intense attraction. However, after a long enough time together, the flow of new information about each other slows to a trickle. At this point, the slope of intimacy with respect to time is flat, and passion dies. To the extent that passion formed the basis for a marriage, spouses will inevitably experience a loss in satisfaction over time.

Others envision the decline in satisfaction partly as an inevitable consequence of the increasing pressure put upon marriage to gratify individuals' needs for emotional fulfillment. Marrying at the height of romantic love and compatibility has the unintended consequence of promoting disillusionment when one or both partners changes (Glenn, 1998; VanLaningham et al., 2001). The downturn in marital happiness over time is especially pronounced among younger marriage cohorts (Glenn; VanLaningham et al.). This has been attributed to a waning adherence to the ideal of marital permanence since the advent of no-fault divorce. Acknowledging the prospect that a marriage is terminable undermines the

motivation to seek resolution of difficulties and gives freer rein to the expression of negativity than would otherwise be the case. Couples committed to staying together at all costs frequently cite such commitment as the principal reason for the happiness of their union, because it forces the resolution of problems (Lambert & Dollahite, 2006).

How do these theories inform the comparison of covenant vs. standard marriage? The emergent-distress, enduring dynamics, and vulnerability-stress-adaptation frameworks do not, in all likelihood, distinguish covenants from standards. Both types of couples are likely to bring comparable interpersonal problems to the relationship and both are equally prone to counterproductive conflict management styles. However, processes associated with disillusionment and the waning of passion with rising intimacy may be different for these two types of couples. First, covenant couples must undergo premarital counseling, and are required to engage in the mutual disclosure of potential stumbling blocks to the marriage. It is therefore less likely that they can maintain illusions about each other prior to marriage than is the case for standards. Second, covenant marriage requires a long-term, communal orientation that is somewhat inimical to expressive individualism (Cherlin, 2009; Baker, Sanchez, Nock, & Wright, 2009). This suggests that covenant couples may not be as prone to the disenchantment attendant on the dissipation of passion. They were most likely not as motivated by passion in the first place. Rather, they see marriage as a union ordained by God, the primary function of which is mutual, enduring support (Baker et al., 2009). Although these processes are not testable in the current study, they are offered to suggest why covenants might exhibit a flatter trajectory in marital satisfaction over time, compared to standards.

Hypotheses

Based upon the foregoing considerations, we tender the following hypotheses.

- H₁** Initial average marital quality levels will not differ for standards vs. covenants.
- H₂** Average marital quality will decline more steeply over time for standards than covenants.

The Problem of Selectivity

Two forms of selectivity are particularly relevant when evaluating the influence of covenant marriage on marital satisfaction: selective recruitment into covenant marriage and selective dropout of covenants from marriage. Regarding selective recruitment, contracting a covenant marriage is a rare event. To date, only two percent of marriages in Louisiana are contracted as covenant marriages (Nock et al, 2003). What factors discriminate these couples from those entering standard marriages? Of measured attributes, religiosity and sex-role traditionalism are particularly prominent, and should therefore be controls in any analysis. Covenants are both more religious, and adhere to a substantially more fundamentalist religious belief system, compared to standards (Baker et al., 2009; Nock et al.). Studies generally find that greater religiousness, whether tapped by affiliation or participation, is associated with greater marital satisfaction and less deterioration in satisfaction over time (Clements, Stanley, & Markman, 2004; DeMaris, 2010; Dush, Taylor, & Kroeger, 2008; Ellison, Burdette, & Wilcox, 2010; Lambert & Dollahite, 2006; Mahoney et al., 1999; Wolfinger & Wilcox). Similarly, covenants are significantly more traditional with respect to gender roles than their standard counterparts, even after controlling for religiosity and other demographic factors (Baker et al., 2009). Some scholars maintain that adherence to traditional gender roles is beneficial for marital quality (Lye & Biblarz, 1993). At the least, endorsement of nontraditional roles appears to be associated with more distress (Amato & Booth, 1995; Rogers & Amato, 2000; White, Booth, & Edwards, 1986). Spousal incongruence in attitudes is especially likely to precipitate disagreements. And among

disagreeing couples, the lowest level of marital satisfaction has been found where it was the wife who endorsed nontraditional attitudes (Lye & Biblarz).

Nonetheless, given the low base rate of election of covenant marriage, there is likely to be considerable unmeasured selectivity that cannot be captured easily with observed measures. For example, a communal vs. individualistic orientation (DeMaris, 2007) might lead couples both to opt for covenant marriage and to be more satisfied with their marriages. One would therefore anticipate that unmeasured selective recruitment would elevate the effect of covenant marriage in the analysis. And, as noted above, selective dropout should have the effect of diminishing any observed advantage covenant marriage might confer over time. We examine the impact of both forms of selectivity on our findings.

Finally, to minimize equation error variance and thereby enhance the precision of estimates, we include a number of other controls found in past research to be predictive of marital quality. These include education, race, age, the presence of children, and various behaviors that constitute premarital risk factors (Brown, Orbach, & Bauermeister, 2008; Carlson, McLanahan, & England, 2004; Edin, 2000; Lichter, Graefe, & Brown, 2003; Lye & Biblarz, 1993; Swisher & Waller, 2008; VanLaningham, Johnson, & Amato, 2001).

Method

The Data

The data are from the Marriage Matters Panel Survey of Newlywed Couples, 1998 – 2004. This consists of three waves of a mail survey of newlywed couples in Louisiana, followed from three to six months after their wedding date until about the seventh year of marriage. The sample selection criteria consisted of two steps. First, seventeen of sixty parishes were selected randomly and proportionate to size. Second, from these parishes all recently filed covenant marriages, and standard marriage licenses filed immediately before and after the covenant licenses, were drawn. An identical questionnaire was sent to each spouse in the couple, with instructions that they should be filled out without consulting each other. Surveys were conducted according to Dillman's (2000) tailored design method. On average, the second wave of the survey was conducted 21 months after the first, and the third wave took place 6 years after the first (Nock et al., 2008). The initial survey netted 707 couples, 307 of whom were covenant marriages, representing a response rate of 49% of couples to whom questionnaires were sent. Ninety-seven of these couples were later discovered to have divorced between the first and third waves of the study. Excluding these divorced couples, the response rates at the second and third waves were 85% and 92%, respectively.

Measures

Outcome variable—The outcome variable for this study was *marital satisfaction*. It was based on eight items asking each spouse how satisfied he or she was with the following aspects of the marriage: physical intimacy, love, conflict resolution, degree of fairness, quality of communication, economic well-being, emotional intimacy, and the overall relationship. Response options for each item ranged from 1 (*very dissatisfied*) to 5 (*very satisfied*). Eight-item scale reliabilities across the three waves of measurement ranged from .89 – .91.

Focal explanatory variable—Our focal independent variable was covenant-marriage status. *Covenant marriage* was a between-subjects dummy variable coded 1 if the wife reported that the couple had entered a covenant marriage, and 0 otherwise. For cases in which the wife's response was missing, we based classification on the husband's report.

Within-subjects control variables—Within-subjects controls all had values that could change over measurement occasions. *Religiousness* was a four-item scale composed of measures of the frequency of church attendance, coded 0 (*never*) to 7 (*several times a week*), the frequency of prayer, coded 0 (*never*) to 5 (*several times a day*), agreement with being a religious fundamentalist, coded 1 (*strongly disagree*) to 5 (*strongly agree*), and the importance of religious faith in the respondent's life, coded 1 (*not important at all*) to 5 (*extremely important*). Because the items were in different metrics they were standardized prior to summing. High values represented more religious respondents. Reliabilities across spouses and waves ranged from .79 – .85. *Sex-role traditionalism* (SRT) was a seven-item scale with representative items “the husband should spend as much time as the wife taking care of infants and toddlers,” and “all in all, family life suffers when the wife has a full-time job.” Responses ranged from 1 (*strongly disagree*) to 5 (*strongly agree*) and were reverse-coded, where appropriate, so that a high score represented the most traditional response. Reliabilities across spouses and waves ranged from .61–.63. Because the disparity in spouses' SRT might have a more negative effect on marital satisfaction where husbands were the more traditional partners, a further parsing of SRT scores was utilized. Here we employed DeMaris, Mahoney, and Pargament's (2011) level-polarity-disparity coding scheme. In particular, SRT *level* was the mean of spouses' SRT scores, SRT *polarity* was a dummy for the husband's score being higher than the wife's, and SRT *disparity* was the absolute difference between their scores. Including the *disparity* x *polarity* interaction in the model along with these three components allowed us to assess whether the effect of spousal incongruence in attitudes varied according to which spouse had the more traditional attitude. *Preschool children* and *school-age children* were dummy variables flagging the presence of children under 5, and children between 5 and 18, respectively, in the household at any given time

Between-subjects control variables—Like covenant-marriage status, the between-subjects controls were measured in the first wave and were constant over time. *Husband's education* was in years of completed schooling. *Average age* was the mean of spouses' ages. *Black couple* was a dummy variable for both spouses being Black. *Other-race couple* was a dummy for spouses being other than both White or both Black. (Both spouses being White was the contrast group.) *Premarital counseling exposure* was a dummy variable coded 1 if the total number of premarital counseling hours received by both partners was greater than 8—the median for all couples—and 0 otherwise. *High premarital risk* was a dummy for either partner reporting one or more of several different difficulties during dating. These included not getting a “good picture” of what the other was really like, being romantically or sexually involved with others at the same time, breaking up and getting back together more than once, and having a lot of conflict in the relationship. *Uncertain about marriage* was a dummy variable for either spouse reporting that they were somewhat or very unsure about having made the right decision to marry “this person at this time.” *Husband's hard living* and *wife's hard living* were each counts of the number of disadvantages spouses brought to the marriage. These include having no job or car, having less than \$1000.00 in savings, not owning a home, having more than \$500 in credit card or other significant debt, having declared personal bankruptcy, having a criminal record, having a drinking or drug problem, and having a medical problem. As descriptive statistics for this sample are provided extensively elsewhere (Nock et al., 2008), they are not reproduced in this paper.

Statistical Model

The primary statistical technique we employed was the multivariate version of the dyadic growth model, estimated using restricted maximum likelihood, or REML (Fitzmaurice, Laird, & Ware, 2004; Lyons & Sayer, 2005; Raudenbush, Brennan, & Barnett, 1995). This approach allowed us to model husbands' and wives' trajectories in marital satisfaction over

time in a parallel fashion. The error structure of the model adjusts for the interdependence of responses across time, measure, and gender, within couple. Normally, it is customary in growth-curve analysis to specify one fewer random growth parameters than there are waves of data. Fitting a model with more random growth parameters (four, in all) than measurement waves, as in the current study, could nonetheless be accommodated by including in the dataset two parallel measures of the dependent construct per spouse (Lyons & Sayer). Therefore we randomly separated each eight-item marital satisfaction scale into two four-item scales with comparable variances and reliabilities. This was accomplished for each scale as follows. Items were paired up based on having similar variances. Each item in the pair was then randomly assigned to one of the two parallel scales. This was done separately for each spouse at each wave of measurement. The resulting parallel measures each had range 4 – 20, with the high score indicating maximum satisfaction. The range of reliabilities for the parallel measures across spouses and waves was .74–.88. Each couple then contributed 12 records (2 spouses $\times$ 2 parallel measures $\times$ 3 time points) to the person-period data set used in the analysis. In the absence of missing data, there would be $12 \times 707 = 8,484$ records in the dataset.

The model can be expressed as an amalgam of both within-subjects and between-subjects submodels. As an example, we illustrate the first model presented in the tables below. The level 1, or within-subjects, submodel is:

$$Y_{it} = female_{it}(\pi_{f0i} + \pi_{f1i} Time_t) + male_{it}(\pi_{m0i} + \pi_{m1i} Time_t) + \varepsilon_{it}$$

where Y_{it} is the t th marital satisfaction score for the i th couple ($t = 1, 2, \dots, 12$; $i = 1, 2, \dots, 707$); $female_{it}$ is coded 1 for records containing the wives' responses and 0 otherwise; $male_{it}$ is coded 1 for records containing the husbands' responses and 0 otherwise, and $Time_t$ represents elapsed years since the first wave and is coded 0, 1.75, and 6 for all couples. The π s are random growth parameters representing a linear trajectory in the response over time for each gender, while ε_{it} represents measurement error in trying to tap latent true marital satisfaction using the observed parallel scales (Raudenbush et al., 1995).

A level 2 or between-subjects submodel containing the factor *covenant marriage* is:

$$\begin{aligned}\pi_{f0i} &= \beta_{f00} + \beta_{f01} Cov_i + u_{f0i} \\ \pi_{f1i} &= \beta_{f10} + \beta_{f11} Cov_i + u_{f1i} \\ \pi_{m0i} &= \beta_{m00} + \beta_{m01} Cov_i + u_{m0i} \\ \pi_{m1i} &= \beta_{m10} + \beta_{m11} Cov_i + u_{m1i}\end{aligned}$$

where the β s are fixed-effects parameters representing the effects of between-subjects factors—in this case being in a covenant marriage—on couples' growth parameters. Cov_i is the covenant marriage dummy and the u_{f0i} , etc., are random errors in the equations for the π s. That is, the growth parameters representing the linear trajectory in marital satisfaction over time for each spouse are specified as varying randomly across couples, and are moreover influenced by covenant marriage status.

Additional growth parameters—e.g. a quadratic term in Time—can be added to the level 1 submodel to represent nonlinear trajectories. However, initial plots of husbands' and wives' trajectories suggested that both were characterized by a linear decline over time. Hence, for reasons of parsimony such quadratic effects were omitted. Additional within-subjects factors, along with Time, can also be added to the level 1 submodel. Similarly, additional between-subjects factors, along with Cov_i , can be added to the level 2 submodel.

Substituting the level 2 submodel for the π s into the level 1 submodel results in the composite model:

$$Y_{it} = \text{female}_{it}(\beta_{f00} + \beta_{f01} \text{Cov}_i + \beta_{f10} \text{Time}_t + \beta_{f11} \text{Cov}_i * \text{Time}_t) \\ + \text{male}_{it}(\beta_{m00} + \beta_{m01} \text{Cov}_i + \beta_{m10} \text{Time}_t + \beta_{m11} \text{Cov}_i * \text{Time}_t) \\ + \varepsilon_{it} + u_{f0i} \text{female}_{it} + u_{f1i} \text{female}_{it} * \text{Time}_t + u_{m0i} \text{male}_{it} + u_{m1i} \text{male}_{it} * \text{Time}_t$$

where the last row of terms represents an equation error which models both serial correlation and heteroscedasticity in the within-couple disturbances. Thus is the interdependence of responses across time, measure, and gender, within couple, accounted for (Raudenbush, et al., 1995; Singer & Willett, 2003). We used SAS's (version 9.1) program MIXED to estimate the models.

Missing data—Growth-curve modeling is robust in the face of missing responses, provided that a sufficient number of cases have complete data at all waves of measurement, and the data are missing at random, or MAR (Fitzmaurice et al., 2004; Singer & Willett, 2003). The latter condition obtains as long as the probability of a missing response at time t depends only on observed predictor or response values at other times, but not on the value of Y at time t that would have been obtained had it been observed (Fitzmaurice et al.). Fitzmaurice et al. maintain that MAR should be the default assumption for missing longitudinal data. In this study, 323, or 45.7%, of the couples had valid marital satisfaction scores for both spouses at all three measurement occasions, and all couples had valid scores for at least one spouse in at least one wave. All analyses utilized only the 6,170 couple-periods with valid response scores. In several preliminary runs, valid means (or modes, for dummy variables) were substituted for missing data on predictors. However, all key models were re-estimated using multiple imputation to replace missing data for the explanatory variables, utilizing the MI and MIANALYZE programs in SAS. Following Allison's (2002) recommendation, imputed data sets were generated from the couple-level data in order to account for the interdependence of respondents' scores for the same variables across time. Fifty imputed data sets were employed to arrive at robust parameter estimates and standard errors. Only the multiple-imputation-based results are shown in the tables.

Addressing selective dropout—To examine the impact of selective dropout, we eliminated the 97 couples who were known to have dissolved their unions by the end of the study. The resulting dataset of continuing marriages, consisting of 5,620 person-periods, was then subjected to the same sequence of analyses. This sample more closely resembles the pool of intact marriages that remains over a longer period of time, after selective attrition has removed the unhappier marriages.

Addressing selective recruitment—For addressing the impact of selective recruitment, choices were limited. A commonly used technique for controlling unmeasured heterogeneity is fixed-effects regression modeling (Allison, 2009). However, this is only effective for removing the effect of heterogeneity on within-subjects regressors. As our focus variable—covenant marriage—is a between-subjects factor, it would not benefit from this approach. Instead, we utilized the treatment-effects model (Greene, 2003). This model is not adaptable to growth curves, therefore we limited the analysis to the data from wave 1. The technique is a variant of Heckman's (1979) sample-selection model. However, instead of modeling selection into the sample, it models selection into treatment categories. We therefore used it to model the effect of covenant status on wave 1 marital satisfaction while controlling for unmeasured selectivity into covenant status. The key to whether selection bias is an issue is whether ρ , the unobserved correlation of error terms from the substantive and selection equations, is significant. If it is not, then there is no evidence of selection bias. Rather, any

selectivity is adequately addressed with the covariates in the substantive model. For this analysis, we used all study covariates to model both marital satisfaction and selection into covenant marriage. However, for model identification purposes, we employed three additional predictors of selection into covenant marriage that were found in preliminary analyses not to affect marital satisfaction, net of model covariates: whether the couple had cohabited before marrying, whether either spouse had been previously divorced, and whether either spouse's parents had divorced. Instead of parallel scales, the full eight-item marital satisfaction scales were used for both spouses (alpha reliabilities were .89, .90, for husbands, wives, respectively). This model has no counterpart for dyadic data. Therefore we followed the principle that applies to seemingly unrelated regression equations: independent estimation of husband and wife equations is statistically justifiable provided the same sample and regressor set are used each time (Greene, 2003). Thus, for this analysis, we used only the 560 couples for whom both spouses had valid marital satisfaction scores. We employed Stata's TREATREG program to perform this analysis. Results of the sensitivity analyses for selectivity are discussed below, after the main findings.

Results

Growth-Curve Findings

Tables 1 and 2 present REML estimates of effects for wives' and husbands' (respectively) growth-curve analyses, along with global *R*-squared values (Singer & Willett, 2003) also averaged over all 50 imputed datasets. The numbers outside parentheses represent analyses that utilize all couples; we focus on these first. (The parameter variances for the intercepts and slopes of the time trajectories for both genders were highly significant in all models and are not shown.) A decomposition of response variability (not shown) suggested that 52% of the variance in marital satisfaction was between couples, whereas 48% was over gender, measure, and time, within couples. Unconditional growth models for each spouse (not shown) suggest that both spouses start out with the same level of satisfaction in wave 1. However, both experience a significant linear decline in satisfaction over time. And wives' satisfaction declines at a faster rate than husbands'.

Is this pattern affected by covenant status? Model 1 is the model illustrated above. It examined the trajectory in marital satisfaction as a function of covenant status, alone. This model tested both study hypotheses above, without controlling for any covariates. A nonsignificant main effect of covenant marriage would imply that there is no significant difference in initial marital happiness according to type of marriage, as hypothesized. A significant positive interaction coefficient for *covenant marriage* $\times$ *time* would imply that the corrosive effect of time on marital satisfaction was significantly less pronounced among covenant couples, also as hypothesized. For wives, neither the main effect of covenant status (.0297) nor its interaction with time (0.029) were significant. For husbands, however, the main effect of covenant status was significant and positive (0.436). As with wives, there was no interaction of covenant status with time. Hence, for husbands there appeared to be a time-invariant increment in marital satisfaction of about four-tenths of a unit, on average, that was due to being in a covenant marriage. Because the *covenant marriage* $\times$ *time* term was very nonsignificant ($p > .46$) in both models, it was dropped from further analyses. Moreover, further testing (not shown) revealed that the significant gender difference in the slope of time was invariant to covenant status. That is, regardless of whether couples were in a covenant marriage, women's marital satisfaction declined at a faster rate over time, compared to men's.

Model 2 in each table added all controls to the equation with the exception of the three factors that most distinguish covenants from standards: premarital counseling exposure, SRT, and religiousness. The effect of being in a covenant marriage remained nonsignificant

for wives. For husbands, the effect was somewhat diminished (0.356 vs. 0.436), but still significant. For both wives and husbands, being high on premarital risk, having been uncertain about the marriage, and having preschool children in the household were all associated with reductions in marital satisfaction over time. Two interaction effects were also common to both spouses. The negative linear trend in marital satisfaction over time was slightly less pronounced when husbands had more education. But it was more pronounced for Blacks than Whites. There were some additional significant covariates in the model for husbands. A marginally ($p < .1$) significant main effect for husband's education (-0.078) suggested that initial marital satisfaction was lower for more-educated husbands. Husbands' satisfaction was also lower among couples of other races, compared to Whites, and when husbands came to marriage with a more pronounced history of hard living. On the other hand, older couples were characterized by husbands reporting greater marital satisfaction.

Model 3 added religiousness and SRT measures to the model to assess the extent to which differences on these factors accounted for any effect of covenant marriage on the response. For wives, there was no effect of covenant marriage to explain. But of the added factors, religiosity elevated marital satisfaction, while greater couple-level SRT reduced it. There was also a marginally significant effect of SRT disparity, such that a greater incongruence in spouses' sex-role attitudes detracted from wives' satisfaction at any given time. For husbands, the addition of the new covariates reduced the effect of covenant marriage to nonsignificance. Apparently, this was due to the addition of religiosity (ascertained in a separate analysis not shown), as the covenant effect actually got stronger with the addition of SRT alone. As was the case for wives, a greater SRT level was seen to be associated with lower marital satisfaction. None of the other added regressors were significant for husbands.

Model 4 added premarital counseling exposure to the model to examine whether any effect of covenant marriage might be explained by counseling. For wives, premarital counseling had no significant effect on the response, and covenant marriage, as before, was also nonsignificant. For husbands, however, premarital counseling had a marginally significant positive effect on marital satisfaction. The effect of covenant marriage also remained nonsignificant for husbands in this final model.

Sensitivity Analyses: the Impact of Selectivity

The effect on our findings of selective dropout can be seen by regarding the parenthetical figures in Tables 2 and 3. These represent coefficients from the same sequence of models as just discussed, but utilizing only the continuing marriages. With respect to most model covariates, mimicking selective dropout made little difference in the coefficients. However, for husbands, the effect of covenant marriage underwent some change. The zero-order effect of covenant marriage in Model 1 was noticeably weaker (0.348 vs. 0.436), yet still marginally significant, when allowing for selective dropout. This phenomenon was anticipated. However, this effect grew somewhat larger than before (0.383 vs. 0.356), once demographic variables were controlled in Model 2. A similar pattern obtained in Model 3, in which the covenant effect was larger with, vs. without selective dropout, and marginally significant ($p < .051$) even after controlling religiosity and SRT. In Model 4, the addition of premarital counseling reduced the effect to nonsignificance. The positive effect of premarital counseling remained marginally significant in this model.

The results of assessing the influence of selective recruitment are shown in Table 3. The OLS results, which do not address selectivity, showed slightly positive, but nonsignificant, effects of covenant marriage on marital satisfaction for both spouses. A number of factors were seen to discriminate covenant from standard marriage (in the "Pr (Covenant)" columns). Hence, Blacks, older couples, those with preschool children, and those who cohabited premaritally were less likely to be in covenant marriages. Those with greater

counseling exposure, the more religious, the more gender traditional, and couples in which either spouse had previously divorced were more likely to be covenant couples. Controlling for selectivity (the last two columns in the table) changed little. The positive effect of covenant marriage appeared to become *more* (although only marginally) significant for wives when controlling for unmeasured selectivity. But the test for ρ at the bottom of the table was nonsignificant for both genders. Thus, there was little evidence for a problem arising from unmeasured selectivity in this model. If it were operant, the negative value of ρ suggests that it was contrary to expectation: the tendency to select into covenant marriage would be associated with *lower*, not greater, marital satisfaction.

Discussion

The principal aim of the current study was to assess potential differences between covenant and standard couples in the trajectory of marital satisfaction over the first several years of marriage. We had anticipated no difference in initial satisfaction levels by marriage type, but that the rate of decline would be more pronounced for standards. These expectations received partial support. For wives, no difference in initial satisfaction levels was detected by marriage type, as anticipated; but we also found no difference in the rate of decline in marital satisfaction, contrary to expectation. For husbands, there was also no difference in the rate of satisfaction decline by marriage type. But there was a significant positive effect of covenant status on marital satisfaction level, which persisted net of demographic controls. Controlling for religiosity and sex-role traditionalism reduced this effect to nonsignificance. But when allowing the sample to be culled by selective dropout from marriage, it became, once again, marginally significant. Adding premarital counseling exposure rendered it nonsignificant. These findings suggest that covenant marriage may be somewhat beneficial for men's marital satisfaction level by virtue of its requirement for premarital counseling. The latter most likely sensitizes men to behaviors that need either to be cultivated or suppressed in order to render their marriages viable. Nevertheless, any such benefit for husbands is miniscule, at best. The zero-order effect of covenant marriage for husbands is, at most, about a seventh of a standard deviation increment in marital satisfaction. Perhaps the more important take-home message is that there is no evidence of covenant couples being trapped in unhappier marriages than their standard-marriage counterparts by virtue of having made a more binding marital commitment. Controlling for unmeasured selectivity into covenant marriage made little difference in the results.

Effects on marital satisfaction of demographic and other controls were also noteworthy. Religiosity did not enhance satisfaction levels for husbands, but demonstrated a significant positive effect on satisfaction for wives. On the other hand, conservative sex-role attitudes were associated with lower satisfaction for both spouses. And as has been supported by most prior studies of the course of marital satisfaction over time, the trajectory in satisfaction was characterized by a linear decline for both spouses (Glenn, 1998; Huston, et al., 2001; Kurdek, 2002; Umberson, et al., 2005; VanLaningham, et al., 2001). Gender differences in marital satisfaction emerged that are consistent with trends found in prior work (Brennan, Barnett, and Gareis, 2001). Although no gender difference was found in initial satisfaction level, wives' satisfaction declined at a more pronounced rate, compared to husbands'. This gender difference obtained among covenants as well as standards.

Of the remaining factors that were predictive of satisfaction levels, high premarital risk and uncertainty about the marriage stand out as corrosive for both spouses. These effects are consistent with the enduring dynamics model of marriage, which posits that marital unhappiness is the end result of problems and patterns of interaction already present during courtship (Huston et al., 2001; Kurdek, 2002; Lavner & Bradbury, 2010). Effects of race were also consistent with prior research (Ellison et al., 2010). Although Black and White

couples began with similar levels of satisfaction, the linear decline in satisfaction was significantly more negative for Blacks than Whites, among both husbands and wives. And, as others have found (Umberson, et al., 2005; White et al., 1986), children were associated with reduced satisfaction levels. The presence of preschool children in the home at any time was associated with reduced marital satisfaction for both husbands and wives.

Some limitations of the present study qualify the conclusions that can be drawn. First, although the data represent the largest sample of covenant marriages collected to date, the generalizability of results is limited by nonresponse. Only about half of selected couples responded to the survey. Second, only 2% of all couples in Louisiana opt for covenant marriage, raising the possibility of unmeasured selectivity confounding the results. Although we tried to address this problem and found no evidence of selection effects, this is an issue that warrants further scrutiny. Third, only one dimension of marital quality has been investigated—marital satisfaction. It is possible that more pronounced differences between covenants and standards—in either direction—would manifest themselves in other marital domains not assessed in our study. These include such factors as love for the partner, marital decision-making, and intimate violence. Subsequent research with a wider variety of measures tapping different marital domains would help to flesh out the extent to which marital quality might be affected by the covenant.

In the meantime, our findings can contribute to the debate over healthy marriage initiatives. We find that covenant marriage may stave off marital disruption, but has only limited impact on marital satisfaction. The benefits appear to accrue only to husbands, and to be partially attributable to premarital counseling. Of course, some would argue that, if covenant marriage keeps couples together—which is better for children—without trapping them in unhappier marriages, then there is a net gain. But as very few couples are opting for covenant marriage, this benefits only a very small minority of children. And the importance of marriage type for satisfaction appears to be far outweighed by premarital risk, uncertainty about one's mate choice, and the presence of preschoolers in the home. Adding a second definition of marriage to a state's matrimonial statutes may foster more problems than it solves. By allowing more than one version of marriage, covenant legislation may pave the way for special interests to pursue other marriage forms—e.g. polygamy—that are not in a state's interest to support. Rather than legislate covenant marriage, policymakers might be better advised to support and fund marriage education in secondary school, as well as premarital counseling programs later on. Prospective marital partners could benefit from sessions in which each person discloses the marriage risks they bring to the partnership, and lays out a plan for minimizing the damage they may cause. The corrosive effects of gender role traditionalism on marital satisfaction may also be a particularly useful focus for counseling. Couples embarking on modern companionate individualized marriage may need assistance articulating and enacting their visions of the social roles of wife and husband. This goal may be fruitful, given research showing gender mistrust as a barrier to quality intimate relationships (Burton, Cherlin, Winn, Estacion, & Holder-Taylor, 2009; Waller & McLanahan, 2005). Premarital counseling may therefore be effective as a filtering mechanism, either by redirecting some couples away from marriage, or by equipping others with the skills needed to forge a harmonious relationship. Most likely, the difficulties inherent in navigating the stormy seas of modern companionate marriage will not be solved simply by placing more statutory constraints on entry into, and egress from, matrimony.

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Table 1

Restricted Maximum Likelihood Estimates of Fixed Effects in Longitudinal Dyadic Growth Models for Wives' Marital Satisfaction.^a

Explanatory Variable	Model 1	Model 2	Model 3	Model 4
<i>Between-Subjects Factors</i>				
Intercept	16.199 ^{***b} (16.396 ^{***c})	17.513 ^{***} (17.532 ^{***})	19.130 ^{***} (19.194 ^{***})	19.057 ^{***} (19.123 ^{***})
Covenant Marriage	0.297 (0.263)	0.096 (0.155)	-0.007 (0.095)	-0.102 (0.006)
Husband Education		-0.040 (-0.061)	-0.037 (-0.058)	-0.044 (-0.067)
Average Age		0.004 (0.012)	0.005 (0.015)	0.007 (0.017)
Black Couple		0.301 (0.128)	0.055 (-0.143)	0.081 (-0.121)
Other-Race Couple		-0.381 (-0.351)	-0.409 [†] (-0.395)	-0.362 (-0.354)
Premarital Counseling Exposure				0.308 (0.283)
High Premarital Risk		-1.601 ^{***} (-1.548 ^{***})	-1.558 ^{***} (-1.496 ^{***})	-1.535 ^{***} (-1.477 ^{***})
Uncertain About Marriage		-2.296 ^{***} (-1.920 ^{***})	-2.243 ^{***} (-1.895 ^{***})	-2.257 ^{***} (-1.913 ^{***})
Husband's Hard Living		-0.044 (-0.066)	-0.048 (-0.072)	-0.053 (-0.076)
Wife's Hard Living		-0.081 (-0.050)	-0.071 (-0.044)	-0.075 (-0.045)
<i>Within-Subjects Factors</i>				
Time	-0.264 ^{***} (-0.227 ^{***})	-0.195 ^{***} (-0.164 ^{***})	-0.194 ^{***} (-0.163 ^{***})	-0.192 ^{***} (-0.163 ^{***})
Covenant Marriage x Time	0.029 (0.023)			
Husband Education x Time		0.021 [*] (0.013)	0.020 [†] (0.012)	0.020 [†] (0.012)
Black Couple x Time		-0.179 [*] (-0.140 [†])	-0.172 [*] (-0.132 [†])	-0.172 [*] (-0.132 [†])
Other-Race Couple x Time		0.042 (0.042)	0.049 (0.052)	0.050 (0.053)
Preschool Children		-1.064 ^{***} (-1.019 ^{***})	-0.992 ^{***} (-0.947 ^{***})	-0.989 ^{***} (-0.944 ^{***})
School-age Children		-0.279 (0.275)	-0.276 (-0.284)	-0.264 (-0.271)
Husband's Religiousness			0.025 (0.014)	0.023 (0.012)
Wife's Religiousness			0.066 [*] (0.070 [*])	0.065 [*] (0.069 [*])
Sex-Role Traditionalism Level			-0.077 ^{***} (-0.081 ^{***})	-0.077 ^{***} (-0.082 ^{***})
Sex-Role Traditionalism Polarity			-0.123 (-0.161)	-0.124 (-0.162)
Sex-Role Traditionalism Disparity			-0.061 [†] (-0.063 [*])	-0.062 [†] (-0.064 [*])
SRT Polarity x SRT Disparity			0.041 (0.067)	0.042 (0.068)
$R^2_{y,\hat{y}^d}$	.022 (.025)	.168 (.161)	.176 (.169)	.178 (.172)

^aBased on multiple imputation of missing data using 50 imputed data sets.

^bBased on full sample; $N = 6,170$ person-periods.

^cBased on continuing marriages only; $N = 5,620$ person-periods.

^dExplained variance in marital satisfaction, averaged over 50 imputations.

[†] $p < .1$.

^{*} $p < .05$.

**
 $p < .01$.

 $p < .001$.

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Table 2

Restricted Maximum Likelihood Estimates of Fixed Effects in Longitudinal Dyadic Growth Models for Husbands' Marital Satisfaction.^a

Explanatory Variable	Model 1	Model 2	Model 3	Model 4
<i>Between-Subjects Factors</i>				
Intercept	16.078 ^{***b} (16.323 ^{***c})	17.292 ^{***} (17.345 ^{***})	18.550 ^{***} (18.580 ^{***})	18.458 ^{***} (18.497 ^{***})
Covenant Marriage	0.436 [*] (0.348 [†])	0.356 [*] (0.383 [*])	0.292 (0.388 [†])	0.164 (0.275)
Husband Education		-0.078 [†] (-0.088 [*])	-0.074 [†] (-0.085 [*])	-0.084 [*] (-0.095 [*])
Average Age		0.029 ^{**} (0.042 ^{***})	0.029 ^{**} (0.042 ^{***})	0.030 ^{**} (0.044 ^{***})
Black Couple		-0.173 (-0.212)	-0.290 (-0.304)	-0.263 (-0.280)
Other-Race Couple		-0.994 ^{***} (-0.835 ^{**})	-1.024 ^{***} (-0.875 ^{***})	-0.990 ^{***} (-0.846 ^{**})
Premarital Counseling Exposure				0.386 [†] (0.339 [†])
High Premarital Risk		-1.188 ^{***} (-1.098 ^{***})	-1.160 ^{***} (-1.069 ^{***})	-1.130 ^{***} (-1.047 ^{***})
Uncertain About Marriage		-2.072 ^{***} (-1.781 ^{***})	-2.022 ^{***} (-1.756 ^{***})	-2.031 ^{***} (-1.771 ^{***})
Husband's Hard Living		-0.202 ^{**} (-0.224 ^{***})	-0.210 ^{**} (-0.238 ^{***})	-0.210 ^{**} (-0.238 ^{***})
Wife's Hard Living		0.066 (0.069)	0.076 (0.076)	0.068 (0.071)
<i>Within-Subjects Factors</i>				
Time	-0.194 ^{***} (-0.162 ^{***})	-0.123 ^{***} (-0.094 ^{***})	-0.118 ^{***} (-0.091 ^{***})	-0.119 ^{***} (-0.091 ^{***})
Covenant Marriage x Time	0.054 (0.048)			
Husband Education x Time		0.019 [*] (0.011)	0.018 [*] (0.010)	0.018 [*] (0.010)
Black Couple x Time		-0.195 [*] (-0.162 [*])	-0.188 [*] (-0.154 [*])	-0.188 [*] (-0.154 [*])
Other-Race Couple x Time		0.066 (0.036)	0.078 (0.051)	0.077 (0.050)
Preschool Children		-0.917 ^{***} (-0.857 ^{***})	-0.865 ^{***} (-0.806 ^{***})	-0.864 ^{***} (-0.805 ^{***})
School-age Children		-0.257 (-0.353 [†])	-0.260 (-0.360 [†])	-0.241 (-0.341 [†])
Husband's Religiousness			0.041 (0.013)	0.037 (0.010)
Wife's Religiousness			0.009 (0.021)	0.008 (0.020)
Sex-Role Traditionalism Level			-0.059 ^{**} (-0.062 ^{**})	-0.060 ^{**} (-0.063 ^{**})
Sex-Role Traditionalism Polarity			-0.105 (-0.035)	-0.110 (-0.039)
Sex-Role Traditionalism Disparity			-0.005 (-0.004)	-0.007 (-0.005)
SRT Polarity x SRT Disparity			-0.045 (-0.042)	-0.043 (-0.040)
$R^2_{y,\hat{y}^d}$	.022 (.025)	.168 (.161)	.176 (.169)	.178 (.172)

^aBased on multiple imputation of missing data using 50 imputed data sets.

^bBased on full sample; $N = 6,170$ person-periods.

^cBased on continuing marriages only; $N = 5,620$ person-periods.

^dExplained variance in marital satisfaction, averaged over 50 imputations.

[†] $p < .1$.

*
 $p < .05$.

**
 $p < .01$.

 $p < .001$.

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Table 3

Ordinary Least Squares (OLS) vs. Treatment-Effects (TRE) Regression Estimates for the Effect of Covenant Marriage and Covariates on Husbands' and Wives' Marital Satisfaction at Time 1

Explanatory Variables	OLS Estimates		TRE Estimates			
	Wife	Husb	Pr (Covenant)		Marital Satisfaction	
Intercept	40.613 ***	38.541 ***	-1.114	-1.055	40.605 ***	38.533 ***
Covenant Marriage	0.103	0.124			2.486 $\dot{+}$	2.324
Husband's Education	-0.178 *	-0.192 *	0.041	0.038	-0.211 *	-0.223 *
Average Age	0.037	0.071 **	-0.043 ***	-0.041 ***	0.053 *	0.086 **
Black Couple	0.053	-0.661	-0.383 $\dot{+}$	-0.433 *	0.379	-0.360
Other-Race Couple	0.863	-0.562	-0.300	-0.317	1.097 $\dot{+}$	-0.346
Prenatal Counseling Exposure	0.267	0.763	1.041 ***	1.039 ***	-0.458	0.093
High Premarital Risk	-3.178 ***	-2.592 ***	0.170	0.205	-3.315 ***	-2.717 ***
Uncertain About Marriage	-4.169 ***	-3.813 ***	0.016	0.026	-4.136 ***	-3.782 ***
Husband's Hard Living	-0.402 *	-0.503 **	0.052	0.038	-0.427 **	-0.526 **
Wife's Hard Living	-0.161	0.061	-0.027	-0.017	-0.153	0.068
Preschool Children	-1.346 *	-0.941	-0.569 **	-0.598 **	-1.012	-0.632
School-age Children	-0.489	-0.672	0.168	0.184	-0.628	-0.800
Husband's Religiousness	-0.153	0.072	0.098 **	0.098 **	-0.225 *	0.005
Wife's Religiousness	0.240 *	0.055	0.113 **	0.110 **	0.180 $\dot{+}$	-0.001
Sex-Role Traditionalism Level	-0.126 *	-0.114 $\dot{+}$	0.064 **	0.063 **	-0.170 *	-0.155 *
Sex-Role Traditionalism Polarity	-0.265	-0.190	0.048	0.054	-0.349	-0.268
Sex-Role Traditionalism Disparity	-0.138	0.037	0.004	0.003	-0.157	0.019
SRT Planity x SRT Disparity	0.082	-0.171	-0.065	-0.068	0.145	-0.112
Cohabited Before Marriage			-0.402 **	-0.420 **		
Either Spouse Previously Divorced			0.462 *	0.451 *		
History of Parental Divorce			0.134	0.109		
Rho			-0.314	-0.293		

Explanatory Variables	TRE Estimates					
	OLS Estimates		Pr (Covenant)		Marital Satisfaction	
	Wife	Husb	Wife	Husb	Wife	Husb
LR $\chi^2_{(1)}$ for H_0 : $\text{Rho} = 0$			2.260	1.650		

Note: $N = 560$ couples.

 $p < .1.$

* $p < .05$.

$$p < .01.$$

 $p < .001$.