ORIGINAL ARTICLE

Personal RELATIONSHIPS   WILEY

Does covenant marriage predict latent trajectory groups of newlywed couples?

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Abstract

Covenant marriage is a legally distinct marriage license available in Arizona, Louisiana, and Arkansas in the United States. This study revisited one of the largest longitudinal dyadic studies on covenant versus standard newlywed couples. Using this dataset of 677 different-sex couples, we explored whether being in a covenant marriage could predict how marital satisfaction developed over the first five marital years. We applied the Growth Mixture Modeling (GMM) method to identify groups that differed in their initial marital satisfaction and trajectory. The results revealed three different trajectory groups—one group showing high and stable marital satisfaction, which we named *High Stable*, and two groups showing declines in marital satisfaction, one being medium and the other one being low in satisfaction at the beginning of the marriage, and we named them *Medium Declining* and *Low Declining* respectively. Spouses with lower initial marital satisfaction experienced a faster decline and suffered the highest divorce rate. Actor-Partner Interdependence Model (APIM) analysis revealed that one's group membership was predicted by their partner's membership, suggesting a mutual influence on marital development.

Statement of Relevance: There has been an increasing amount of conservative family legislation passed at both state and national levels between 2021 and 2022 in the United States, invoking public interest in understanding the impact these policies and laws can have on family life. This research re-examined how covenant marriage law—one of the most conservative marital legislations that took place in recent American history—affected the development of newlywed couples' marital development.

Being in a covenant marriage was able to predict husbands' membership as covenant husbands were found to be more likely in the high stable group.

1 | DOES COVENANT MARRIAGES PREDICT LATENT TRAJECTORY GROUPS OF NEWLYWED COUPLES?

Couples typically marry with the expectation that they will have a happy and stable relationship, but the course of a marriage does not always go as desired. In the United States, 630,505 married couples obtained divorces or annulments in 2021 (Centers for Disease Control and Prevention, 2022), which means that, for approximately every three marriages, one ended in a separation or divorce. Not surprisingly, a longstanding concern of both scholars and the public is to understand how marriages change over time in a manner that can lead to marital dissolution and why some marriages are more successful than others.

Jacobson (1985) identified marital satisfaction as the final common pathway through which marital dysfunction is expressed. Consistent with this observation, research shows that one of the strongest predictors of divorce is lower levels of marital satisfaction (e.g., Hirschberger et al., 2009; Lavner & Bradbury, 2010; Weiss et al., 2018; Zare et al., 2013). Given the importance of marital satisfaction in predicting marital outcomes, relationship researchers have become interested in how marital satisfaction changes throughout a marriage, and whether potential subgroups exist within the married population that differ in their marital development. Longitudinal research design combined with group-based trajectory modeling approaches has allowed researchers to identify subgroups where individuals are similar on variables of interest, including relationship satisfaction, relationship quality, and relationship adjustment (see Proulx et al., 2017 for an overview). For the sake of brevity, the term marital satisfaction will be used in this paper when these closely related constructs are discussed. We define marital satisfaction in this study as a subjective evaluation of various aspects of a marital relationship, including intimacy, love, and communication.

The present study adds to the group-based marital development literature by exploring the impact of being in a covenant marriage on marital development over the first 5 years of marriage. Covenant marriage was first legalized in Louisiana, United States, in 1997, as one of the most conspicuous legal efforts of the marriage movement in the 1990s to restore marital stability. In this study, we were interested in the marital experience of those who obtained a covenant marriage license. We examined whether being in a covenant marriage could predict different possible subgroups of marital trajectories. We were also interested in examining the relationship between husband's and wife's group membership and the relationship between group membership and divorce and separation.

1.1 | Covenant marriages

In the late 20th century, the United States experienced a rapid climb in the divorce rate. In 2000, around the same time when this study's data was collected, 944,000 couples obtained

divorces or annulments, which was about 40% of the number of married couples in the same year (Centers for Disease Control and Prevention, 2022). As a response to the rising concern of the high divorce rate and a large body of research showing the benefits of marriage on individuals, particularly children, three states—Arizona, Arkansas, and Louisiana—passed a family law in the late 1990s that allowed couples to apply for a covenant marriage license, an alternative to the standard marriage license. A covenant marriage license is slightly more difficult to obtain and more difficult to break off than a standard marriage. To apply for a covenant marriage license in these states, couples must sign an affidavit stating that they have completed premarital counseling with a state-recognized secular or religious counselor, have revealed all relevant information to their future spouses, and have accepted the restricted grounds for divorce. These grounds are largely traditional fault-based reasons for divorce: adultery, a felony conviction that results in life imprisonment or death, physical or sexual abuse of a spouse or a child of the spouse, abandonment, or a minimum of 2-year separation (Baker et al., 2009; Nock et al., 2003).

Since covenant marriage became available, about five percent of couples in those states chose to apply for such a license. In general, those who chose covenant marriage reported having more adherence to their religious beliefs and traditional views on marriage (Nock et al., 2003). Previous research has also noted that those in covenant marriages report a slightly higher level of satisfaction than those in standard marriages (DeMaris et al., 2012). Couples who did choose the covenant option were reported to have a lower divorce rate after 5 years of marriage—about half of the standard marriages (Nock et al., 2008). Researchers have mainly attributed the low divorce rate largely to the legal restrictions for divorce as well as self-selection, meaning that the couples who considered the covenant option were more likely to remain married.

1.2 | Marital trajectories and latent groups

In the last few decades, several longitudinal couple studies have been conducted to explore differences in marital development using spouses' evaluation of their marital satisfaction (Birditt et al., 2012; Don & Mickelson, 2014; Foran et al., 2013; Gosselin, 2015; Lavner et al., 2012; Lavner et al., 2019; Lavner & Bradbury, 2010; Lorber et al., 2015; Volling et al., 2015; Williamson & Lavner, 2019). In general, the findings of these studies show that subgroups exist among newlywed couples. Most newlywed couples experience either stable or declining marital satisfaction trajectories while increasing and non-linear patterns in marital satisfaction seem to be less common. Most of these studies used heterosexual newlywed couples, and most participants in these studies were white, middle-class, US citizens. These studies spanned from 12 months to 16 years, with four to eight waves of data collection, and sample sizes were between 232 and 431 couples.

Although these longitudinal studies differed in the number of latent groups identified or the shape of the trajectories, they had something in common. First, none found support for a linear increase in marital satisfaction. Rather, most couples either stay stable or decline in their marital satisfaction. Proulx et al. (2017) described this finding as the honeymoon-as-ceiling phenomenon as marital satisfaction peaks during the honeymoon phase. Second, linear declines were more common than nonlinear changes, and marital satisfaction decline is more prominent in wives than husbands. Finally, a high initial level of marital satisfaction seems to be correlated

more with stability, and a lower initial level of marital quality seems to be correlated more with a decline.

There have also been longitudinal studies looking at individuals that differ in their growth trajectories of relationship satisfaction (e.g., Anderson et al., 2010; James, 2015; Kamp Dush & Taylor, 2012). These studies, in general, have larger sample sizes and a longer time span than dyadic studies, but they are limited in their abilities to assess actor, partner, and interdependence effects.

1.3 | Enduring dynamics framework

The enduring dynamics or maintenance model (Caughlin & Huston, 2006) offers a useful framework to understand why marriages that start with a high satisfaction tend to remain stable, and those that start lower tend to decline. This model proposes that couples establish behaviors and beliefs about their interactions before getting married, and these behaviors and beliefs carry into their marriages. As a result, couples with more positive behaviors and positive views of marriage are likely to start their marriages high in satisfaction. The relational dynamic that contributes to the initial high level of satisfaction is then carried into the years following the marriage ceremony. Specifically, newlywed couples who are more religious and choose to enter a more traditional form of marriage, like covenant marriage, may start their marriage with a high expectation to adhere to their marital values, and they may be more likely to maintain their views of the importance of marriage because of their religiosity throughout their newlywed years. The enduring dynamics or maintenance models, which provide a theoretical explanation for the "honeymoon-as-ceiling" effect, are strongly supported by the evidence that high marital satisfaction initially tends to stay high, and low initial marital satisfaction tends to decline (Proulx et al., 2017).

1.4 | Covenant marriage as a predictor

Previous research has investigated various characteristics of subgroups of newlywed couples differing in the development of their relationship satisfaction, including demographic variables, such as age (e.g., Kamp Dush et al., 2008; Lorber et al., 2015), education and income (e.g., Foran et al., 2013), and marital duration (e.g., James, 2015; Kamp Dush & Taylor, 2012). Kamp Dush et al. (2008) found that older individuals were more likely to be in the low, slightly rebounding satisfaction group, and Lorber et al. (2015) found that older men were more likely to be in a low, steady marital satisfaction group. In Volling et al.'s (2015) study, no association was found between age and marital satisfaction trajectories. Education and income were found to be inversely correlated with being in the lower marital quality group in some studies (Anderson et al., 2010; Birditt et al., 2012; Foran et al., 2013; Williamson & Lavner, 2019), but not in others (Don & Mickelson, 2014; Lavner et al., 2012; Lavner & Bradbury, 2010; Lorber et al., 2015). Marital duration was associated with being in the low, slightly rebounding marital satisfaction group in Kamp Dush et al.'s (2008) study and the high declining marital satisfaction group for women in James' (2015) study.

The proponents of covenant marriage argue that a more traditional and religious marriage license can protect marriages from dissolution, which will ultimately benefit the family and society (e.g., Feld et al., 2002). This begs the question of whether a covenant marriage can lead

to a more stable and happier marital experience for both husbands and wives. There is no known study to the authors' knowledge that answer this question. It also remains unexplored whether different marital development subgroups exist among covenant couples and whether covenant marriage can predict group memberships. DeMaris et al.'s (2012) study showed that individuals in covenant marriages report, on average, a slightly higher level of satisfaction than those in standard marriages. Therefore, we postulated that being in a covenant marriage will lead to more high stable marital satisfaction. However, such an effect may be moderated by gender as existing research has shown that wives tend to experience more and faster decline in marital satisfaction than husbands in the newlywed years (e.g., Jackson et al., 2014).

Another point of interest is the relationship between subgroups and marital dissolution, namely divorce and separation. Research has shown that groups with a high initial marital satisfaction and a low decline rate tend to have a lower divorce rate than groups with a low initial marital satisfaction (e.g., Birditt et al., 2012; Kamp Dush et al., 2008; Lavner et al., 2012; Williamson & Lavner, 2019). While the divorce rate has been reported to be lower in the covenant marriage group than in the standard marriage group (Nock et al., 2008), how the divorce rate is distributed among different subgroups also remains unexamined.

Studies reporting results of subsequent analyses have predominately focused on intrapersonal effects meaning how one's characteristics (e.g., age, income, etc.) affect one's marital development. One study looked at intrapersonal and interpersonal effects using the Actor-Partner Interdependence Model (APIM; Don & Mickelson, 2014). Don and Mickelson (2014) found that their husbands' level of anxiety predicted wives' marital development of relationship satisfaction after childbirth, and husbands' marital development of relationship satisfaction could be predicted by their wives' daily stress and self-esteem. In addition to using covenant versus standard marriage to predict trajectory group, considering the interdependent nature of relationships, we were also interested in testing whether a person's latent trajectory group can be predicted by their partner.

1.5 | The present study

Building on previous research, the current study first examined the number of different latent development groups of newlywed husbands and wives using a large sample of data that spanned 5 years of marriage. Based on the findings of Foran et al. (2013), Lavner and Bradbury (2010), Lavner et al. (2012), and Lorber et al. (2015), we hypothesized that there is at least one stable group and two or more declining groups with lower levels at baseline for husbands and wives. We expected to see a high percentage of couples where the two partners belong to groups with similar intercepts and trajectories. Secondly, we examined the relationship between group membership and participants' marital status by the end of the study. Consistent with the results of Foran et al. (2013), Lavner and Bradbury (2010), and Lavner et al. (2012), we expected that couples with low or declining marital satisfaction experienced the highest divorce rate. Lastly, we used the APIM (Kenny et al., 2006) and tested the effect of the partners' group membership, age, months dated, both partners' income, and marriage type (covenant versus standard) in predicting both partners' group membership. We hypothesized that a partner's group membership serves as a predictor for individual group membership because of the interdependent nature of a marriage. Also, we expected that being in a covenant marriage predicts a person's group membership above and beyond the partner's group membership, and that the size is stronger for husbands than for wives. This hypothesis is based on our understanding that

covenant marriage features a high level of religiosity and strong value on marriage and that husbands' marital satisfaction is generally higher than wives.

2 | METHOD

2.1 | Participants and procedure

The present study uses data from the Marriage Matters Panel Survey of Newlywed Couples, 1998–2004 (Nock et al., 2001). We consulted with the IRB in our organization, who determined that our study did not need an IRB approval as this research study was conducted retrospectively from secondary data that was de-identified and available for public. A total of 677 newlywed heterosexual couples from Louisiana participated in this panel survey. All couples were first surveyed within 1 to 6 months of their marriage. Of the 677 couples who participated, 297, or 44%, were in covenant marriages, and 380, or 56%, were in standard marriages. Three waves of data were collected, spanning 5 years. The first wave was collected between 1998 and 2000, the second wave was collected approximately 2 years after the first wave, and the last wave was collected at the 5-year mark after the first survey. All participants were asked in waves 2 and 3 if they remained married with the same spouse from when they were first surveyed. If not, participants did not need to complete the questionnaire about the marriage. Wives and husbands completed all surveys independently at all three waves.

2.2 | Measures

2.2.1 | Marital satisfaction

Marital satisfaction was measured by six different attributes of marital quality. This measure was created by the original researchers in the Marriage Matters Panel Survey study for the purposes of the original data collection (Nock et al., 2001). These six attributes were satisfaction with physical intimacy, love experienced, conflict resolution, fairness in the marriage, communication, and emotional intimacy. Each attribute was measured by a single item on a 5-point scale (1 = *very dissatisfied*, 2 = *dissatisfied*, 3 = *neutral*, and 4 = *satisfied*, 5 = *very satisfied*). A sum score was computed ranging from 5 to 30, with higher scores reflecting higher marital satisfaction. Cronbach's alphas were 0.88 for husbands and 0.88 for wives at time 1, 0.87 for husbands and 0.88 for wives at time 2, and 0.89 for husbands and 0.89 for wives at time 3.

2.2.2 | Demographic variables

The duration of dating before marriage was 30.07 months on average (SD = 26.94, range 1 to 240 months). On average, wives' age was 28.45 years (SD = 8.83), and husbands' age was 30.65 years (SD = 9.81) at wave 1. Individual income was recoded on a four-point scale, with 1 = less than $10,000, 2 = $10,000–29,999, 3 = $30,000–49,999, 4 = $50,000 or more. The median annual income was $10,000–$29,999. Years of education were recoded on a 3-point scale, with 1 = less than 13 years, 2 = 13–16 years, and 3 = more than 16 years. The majority of wives (58.4%) and husbands (53.5%) had a bachelor's or above degree by wave 3. The presence

of children was measured at wave 3 by wives' reports. 44.1% ($N = 130$) of wives in covenant marriages reported having one or more children living in the household, compared to 42.1% ($N = 160$) for standard couples.

2.3 | Analytic plan

Growth Mixture Modeling (GMM) was conducted using Mplus to identify latent groups that differ in the initial satisfaction level (intercept) or the trajectory (slope) by which they change. Maximum likelihood estimation with robust standard errors (MLR) estimation was used (Muthén & Muthén, 1998-2017) because marital satisfaction was substantially skewed (see Table 1). Missingness among tested variables was handled by full information maximum likelihood (FIML) estimation as recommended by Enders and Bandalos (2001). A series of GMM models were estimated to determine the appropriate number of latent classes for husbands and wives separately, which is in accordance with strategies used by others (Dekker et al., 2007; Kuchibhatla et al., 2012). First, a single-group growth curve model was fitted for wives and for husbands. Second, the number of latent groups was increased until the higher-class number model did not converge, or the evaluation criteria indicated that the higher-class model did not improve the model fit. Means and variances of the intercept and slope were allowed to vary

TABLE 1 Correlations and descriptive statistics

Variable	1	2	3	4	5	6
1. MS Time 1	0.59***	0.50***	0.51***	0.11*	0.05	−0.05
2. MS Time 2	0.56***	0.58***	0.61***	0.06	0.07	−0.05
3. MS Time 3	0.45***	0.58***	0.60***	0.17**	0.14	−0.01
4. Age	0.02	0.06	−0.01	0.86***	0.34***	−0.02
5. Income	0.03	−0.04	0.02	0.34***	0.36***	−0.03
6. Months dated	−0.05	−0.04	−0.03	−0.02	0.03	0.92***
Wives						
Mean	24.77	23.58	22.69	28.45	4.27	30.07
SD	4.46	4.85	5.21	8.83	1.82	26.94
Skew	−1.20	−0.87	−0.86	1.76	0.25	2.30
Kurtosis	1.44	0.44	0.46	4.82	−0.13	9.43
N	682	520	486	676	660	676
Husbands						
Mean	24.78	23.97	23.67	30.56	5.48	29.19
SD	4.30	4.35	4.57	9.81	1.86	27.31
Skew	−1.29	−0.91	−1.08	1.53	0.06	2.40
Kurtosis	2.24	1.06	1.52	2.46	−0.33	9.47
N	585	430	382	559	570	572

Note: MS, marital satisfaction. Husbands' correlations are shown above the diagonal. Wives' correlations are shown below the diagonal. Inter-partner correlations are shown along the diagonal.
*$p < .05$. **$p < .01$.
***$p < .001$ (two-tailed).

across different groups. We also allowed the residual variances to vary because they are seldom invariant (e.g., Muthén & Asparouhov, 2002). The models were compared using the Bayesian Information Criteria (BIC), entropy, adjusted Lo–Mendell–Rubin (LMR) likelihood test, and Bootstrapped Likelihood Ratio Test (BLRT). Smaller values of BIC and higher values of entropy indicate a better fit. A significant LMR and BLRT indicate a good fit (Nylund et al., 2007). Once the best-fitting model was identified for wives and husbands, group membership is assigned to each individual based on the highest probability suggested by the GMM.

After membership was identified for husbands and wives, a multiple-group analysis was conducted to test for possible differences in intercepts and slopes across groups. Possible differences in the distribution between wives' group membership and husbands' group membership and the relation between spouses' class membership and divorce were tested using chi-square difference tests. In addition, the APIM framework was used to predict wives' and husbands' group allocation by their partner's group membership, the type of relationship (covenant vs. standard), their individual income at the first wave, age, and months dated. For age, only the actor effects were estimated because of a high intra-dyadic correlation of 0.86. The logistic regression approach was used in R to predict husbands' and wives' group membership (Loeys & Molenberghs, 2013; R Core Team, 2020).

3 | RESULTS

3.1 | Missingness analysis

Missingness percentages were 3.53%, 26.45%, and 32.26% for wives' marital satisfaction at waves 1, 2, and 3, respectively. For husbands, they were 17.26%, 39.18%, and 45.97%. Missing data analyses were conducted using the six marital satisfaction variables, three-time points for each partner. Little's MCAR test revealed that data were not missing completely at random, $\chi^2(85) = 142.68$, $p < .001$.

3.2 | Descriptive statistics

Descriptive statistics and correlations among the study variables are presented in Table 1. Means and standard errors of marital satisfaction are plotted in Figure 1. Both the means and the graphical presentation indicate a gradual decrease in marital satisfaction for wives and husbands. Subsequent comparisons between covenant and standard spouses reveal that covenant husbands ($M = 28.60$) and wives ($M = 26.89$) were, on average, younger in age than those in standard marriages ($M = 31.59$ for husbands and $M = 29.45$ for wives; $p < .001$). Wives in standard marriages were also more likely to have a higher level of income ($M = 4.37$) than wives in covenant marriages ($M = 4.13$; $p = .001$). No difference was found regarding months dated before marriage ($p = .750$).

3.3 | Growth mixture modeling

Results of GMM for the one-group, two-group, and three-group solutions are presented in Table 2. In contrast to the other models, the four-group model did not converge for either wives or husbands. The three-group model was the best-fitting model for both husbands and wives, as
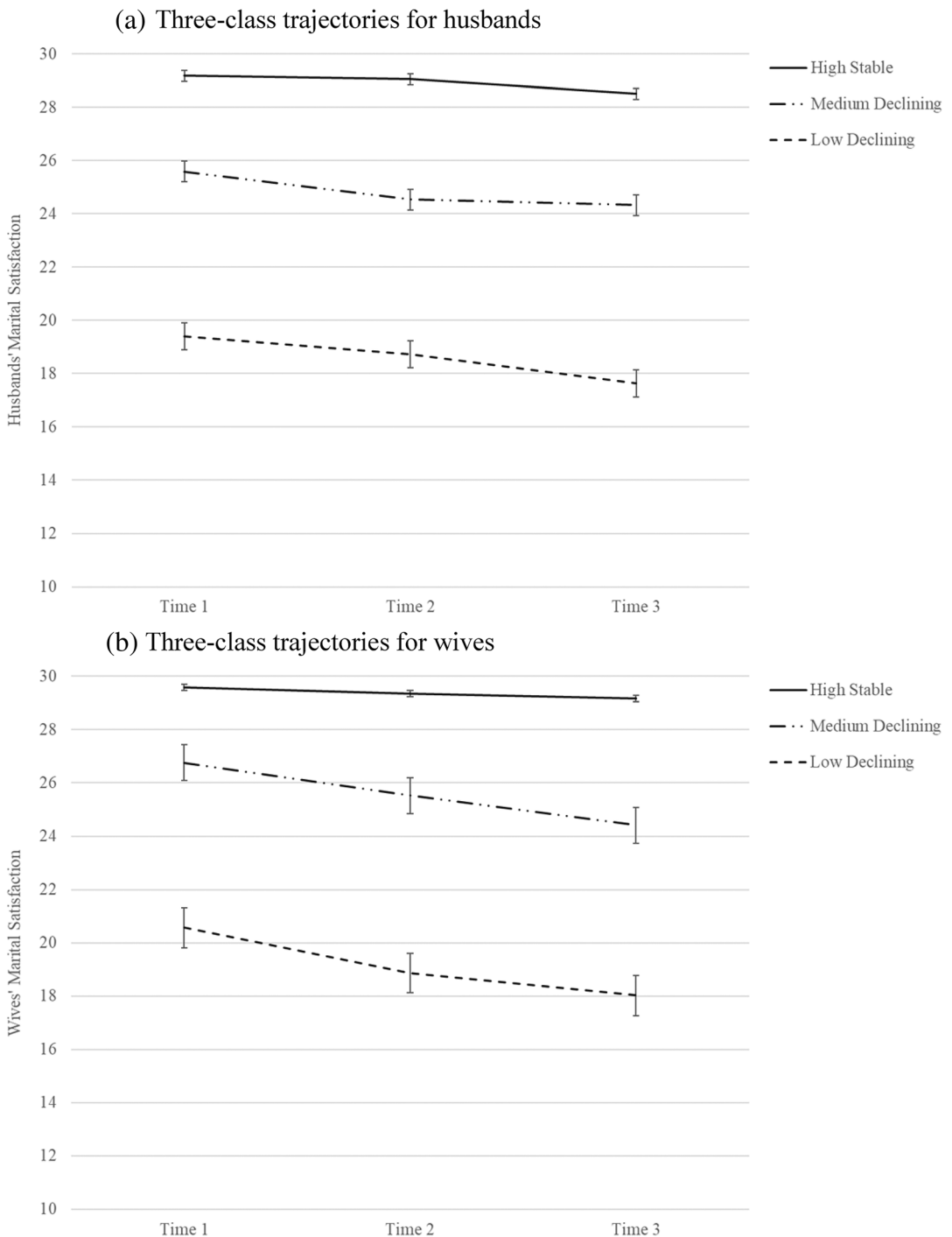
(a) Three-class trajectories for husbands

(b) Three-class trajectories for wives

FIGURE 1 The three-class trajectories of change in marital satisfaction for husbands and wives. (a) Three-class trajectories for husbands. (b) Three-class trajectories for wives.

indicated by improving indices of LL, BIC, entropy, LMR, and BLRT relative to the two-class model. Although the absolute values of entropy were smaller than 0.80 (0.78 for wives and 0.73 for husbands), other indices still clearly favored the three-group model. For the three-group

TABLE 2 Class coverage for marital satisfaction, intercept and slope estimates, and fit indices of the growth mixture models

	Wives			Husbands		
	1 class	2 classes	3 classes	1 class	2 classes	3 classes
Class						
C1	686 (100%)	398 (58%)	69 (10%)	585 (100%)	380 (65%)	91 (16%)
C2		288 (42%)	365 (53%)		205 (35%)	365 (62%)
C3			252 (37%)			129 (22%)
Intercept						
C1	24.67***	27.40***	29.51***	24.68***	26.60***	29.10***
C2		21.37***	26.71***		21.10***	25.45***
C3			20.88***			20.28**
Slope						
C1	−0.42***	−0.54***	−0.07	−0.23***	−0.22***	−0.12
C2		−0.40***	−0.47***		−0.38***	−0.24***
C3			−0.56***			−0.43**
LL	−5038.04	−4723.4	−4625.03	−4047.16	−3829.45	−3728.04
BIC	10108.74	9518.64	9361.08	8126.18	7728.99	7564.40
Entropy	-	0.71	0.78	-	0.65	0.73
LMR	-	613.63**	191.85**	-	424.32**	191.84**
BLRT	-	−5038.04**	−4723.4**	-	−4047.16**	−4723.4**

Abbreviations: BIC, bayesian information criteria; BLRT, bootstrapped likelihood ratio test; LL, log likelihood; LMR, adjusted Lo–Mendell–Rubin.

**p < .01.

***p < .001 (two-tailed).

model, intercept and slope estimates and class sizes are presented in Table 2. Figure 1 displays the trajectories for each group identified by the GMM analyses.

As can be seen, similar patterns of intercepts and slopes emerged for wives and husbands. First, both husbands and wives yielded a group with a high initial level of marital satisfaction (intercept) that did not change significantly over time. In this group, which we name *High Stable*, both husbands and wives reported high marital satisfaction at the beginning of the marriage and tended to stay highly satisfied across time. Second, analyses for both genders yielded a group with a medium initial level of marital satisfaction and a significant decrease in slope. In this group that we name *Medium Declining*, husbands and wives were medium in their marital satisfaction at the beginning of the marriage and decreased with time. Lastly, both husband and wife analyses yielded a group with low initial marital satisfaction, followed by a significant decrease. In this group that we name *Low Declining*, both husbands and wives had low levels of satisfaction at the beginning of their marriage, and their marital satisfaction dropped over time.

3.4 | Multiple group analysis

Next, we used multiple-group analysis to test whether the identified groups differed in their slopes and intercepts. Means of intercepts between *High Stable* and *Medium Declining* were

significantly different in husbands, $\Delta\chi^2(1) = 228.056, p < .001$, and wives $\Delta\chi^2(1) = 157.529, p < .001$. Means of intercepts between *Medium Declining* and *Low Declining* were also significantly different in husbands, $\Delta\chi^2(1) = 124.415, p < .001$, and wives, $\Delta\chi^2(1) = 236.604, p < .001$. In addition, means of intercepts between *High Stable* and *Low Declining* were significantly different in husbands, $\Delta\chi^2(1) = 187.561, p < .001$, and wives $\Delta\chi^2(1) = 275.48, p < .001$.

No significant difference emerged between the slopes of the *High Stable* group and the *Medium Declining* group for husbands, $\Delta\chi^2(1) = 3.618, p = .057$, but for wives, it was significant $\Delta\chi^2(1) = 46.676, p < .001$. Means of slopes between *Medium Declining* and *Low Declining* groups were not significantly different from one another for both husbands, $\Delta\chi^2(1) = 0.676, p = .411$, and wives $\Delta\chi^2(1) = 0.233, p = .629$. Means of slopes between *High Stable* and *Low Declining* were also not significantly different for husbands, $\Delta\chi^2(1) = 1.829, p = .176$, but for wives, it was again significant $\Delta\chi^2(1) = 11.282, p < .001$.

3.5 | Group membership similarity

Table 3 presents membership numbers for possible combinations of husbands' and wives' groups. A 3 (wife classes) by 3 (husband classes) chi-square test of independence indicates that the cell frequencies differ significantly, $\chi^2(4) = 218.01, p < .001$. As expected, the majority (368 or 65.3%) of couples had the same class membership, with most couples belonging to the *Medium Declining* group.

3.6 | Group membership, marital type, and divorce rate

Table 4 presents the frequencies for husbands and wives who remained together and those who separated by the end of the study. Divorce rates were 13.85% for wives and 12.31% for husbands (the numbers are not equal due to missing data). The *Low Declining* groups for both wives and husbands had the highest divorce rates, 22.22% for wives and 21.71% for husbands. A 2 (divorce)

TABLE 3 Husband-wife group membership cross-tabulations

Wives' membership	Husbands' membership			Total (%)
	High stable	Medium declining	Low declining	
Covenant				
High stable	15	9	0	24 (9.7%)
Medium declining	28	113	6	147 (59.5%)
Low declining	2	46	28	76 (30.8%)
Total (%)	45 (18.2%)	168 (68.0%)	34 (13.8%)	247
Standard				
High stable	21	15	1	37 (11.9%)
Medium declining	20	125	19	164 (52.6%)
Low declining	3	45	63	111 (35.6%)
Total	44 (14.1%)	185 (59.3%)	83 (26.6%)	312

TABLE 4 Actual and expected divorce and class memberships for wives and husbands

Gender	Group	Still married	Divorced or separated	Total	Divorce rate
Wives	High stable	62 (59)	7 (10)	69	10.14%
	Medium declining	333 (315)	32 (51)	365	8.77%
	Low declining	196 (217)	56 (51)	252	22.22%
	Total	591	95	686	13.85%
Husbands	High stable	87 (80)	4 (11)	91	4.40%
	Medium declining	325 (320)	40 (45)	365	10.96%
	Low declining	101 (113)	28 (16)	129	21.71%
	Total	513	72	585	12.31%

Note: Expected values are given in parenthesis.

by 3 (classes memberships) chi-square test indicates that more people in the *Low Declining* group divorced than from the other groups, $\chi^2(2) = 23.50$, $p < .001$ for wives and $\chi^2(2) = 16.45$, $p < .001$ for husbands.

3.7 | Predicting group membership

To test our hypothesis whether a partner's group membership, both spouses' own income, one's own age, and months dated predicted one's own group membership, the APIM, and ordinal logistic regression analysis were used. This approach was selected because the three groups suggested by GMM were orderly distinct from one another in their initial level of relationship quality, and their slopes did not cross. The results are presented in Table 5. As expected, partner's group membership predicted one's own group membership for husbands ($b = 2.28$, $p < .001$, $OR = 9.79$) and wives ($b = 2.29$, $p < .001$, $OR = 9.83$). In addition, husbands in a covenant marriage ($b = 0.82$, $p < .001$, $OR = 2.27$) and those older in age ($b = -0.04$, $p < .05$, $OR = 0.97$) were more likely in the highly stable group than those in a standard marriage and younger in age. No such effects were found for wives.

4 | DISCUSSION

Extending the current research on subgroups of marital development (e.g., Proulx et al., 2017), the present study explored latent subgroups in 677 newlywed couples over the first 5 years of their marriage, examined spouses' group assignments, and tested actor and partner effects and how marriage type (covenant vs. standard marriage) was related to group assignments. Three distinct subgroups emerged from the Growth Curve Mixture Modeling Analysis for wives and husbands. They were *High Stable*, *Medium Declining*, and *Low Declining*. The *High Stable* group had a high initial level of marital satisfaction and no significant decline over the 5 years of the study. The *Medium Declining* group had a medium initial level of marital satisfaction that declined significantly over the course of the study. Finally, the *Low Declining* group had a low beginning level of marital satisfaction, and it also declined significantly.

TABLE 5 Actor and partner's effects predicting husbands' and wives' group memberships

Predictor	Husband				Wife			
	Estimate	SE	OR	OR 95% CI	Estimate	SE	OR	OR 95% CI
Partner's membership	2.282***	0.190	9.794	[6.814, 14.339]	2.285***	0.190	9.829	[6.821, 14.411]
Covenant versus Standard	0.822***	0.201	2.274	[1.537, 3.387]	−0.298	0.139	0.742	[0.507, 1.082]
Months dated	0.005	0.004	1.005	[0.997, 1.012]	−0.000	0.003	1.000	[0.993, 1.007]
Age actor	−0.035**	0.012	0.965	[0.944, 0.987]	−0.008	0.012	1.008	[0.985, 1.031]
Income husband	−0.023	0.057	0.978	[0.874, 1.094]	−0.024	0.055	0.977	[0.876, 1.089]
Income wife	0.034	0.058	1.034	[0.923, 1.158]	−0.037	0.057	0.964	[0.862, 1.078]
Intercept 1|2	2.358	0.547			1.676	0.530		
Intercept 2|3	6.522	0.639			5.357	0.582		

Note: CI, confidence interval; OR, odds ratio; SE, standard error. Membership was coded 1 = high stable, 2 = medium declining, 3 = low declining; marriage type was coded 0 = covenant, 1 = standard.
$p < .01$.*$p < .001$ (two-tailed).

The three subgroups we identified are consistent with results obtained by Lavner et al.'s (2012) in their study on marital development. Our study did not find evidence for an increase in martial satisfaction like some other studies found (e.g., Birditt et al., 2012; Foran et al., 2013; Gosselin, 2015; Kamp Dush & Taylor, 2012; Williamson & Lavner, 2019). In our study, the majority of couples fell into the *Medium Declining* group (53% for wives and 62% for husbands).

We did not find a group of newlywed spouses increasing in their marital satisfaction, which speaks for the honeymoon-as-ceiling phenomenon for marital satisfaction as described by Proulx et al. (2017). In our study of newlywed couples who are predominately White, middle-class, heterosexual, Christian, and in their late 20s and early 30s when they married, most spouses' evaluation of their marriage was highly positive at the beginning of their marriage. For the majority of the participants, this was their first marriage, and most of them had no children at the beginning of the study. The positive anticipation of being married, combined with the absence of parenting stress may have likely contributed to this honeymoon-as-ceiling phenomenon. Our comparison between standard marriage and covenant marriage showed that this honeymoon-as-ceiling effect exist in both types of marriage.

Our observation that spouses with lower initial marital satisfaction tended to experience a faster decline over the first five marital years provided support to the enduring dynamic model (Caughlin & Huston, 2006) where the proponents of this model suggest that established relational dynamics (positive or negative) tend to remain in the relationship over time. We speculate that spouses with lower initial marital satisfaction in our study were already experiencing some degree of satisfaction decline before they entered their marriage and such a decline continued throughout the newlywed years. However, it will require future studies with more data prior to marriage to test such a hypothesis.

Group matching revealed that most spouses (65%) in our study shared similar trajectories, which is in line with findings reported in previous studies (e.g., Don & Mickelson, 2014; Lavner et al., 2012). Our findings on the divorce rate corroborate findings from previous studies in that individuals reporting low initial levels of satisfaction have the highest divorce rate (e.g., Birditt et al., 2012; Gosselin, 2015; James, 2015; Lavner et al., 2012). When comparing the divorce rate

between covenant and standard couples, the accumulative percentage of 5-year divorce rates was lower for the covenant marriage group than for the standard group (10.8 vs. 15.8%; see also Nock et al., 2008); however, these rates did not statistically differ from one another. That is, despite the intention to help couples to maintain a happy and stable relationship, the covenant marriage license did not result in a divorce rate that is significantly lower than in standard marriages. Such a finding challenges the effectiveness of the covenant license law. While proponents of such a law may argue that the divorce rate would have differed significantly in a longer term, we believe that other cultural factors, such as gender equality, women's rights, and no-fault divorce may play a meaningful role in whether a couple stays together or not.

In both marriage groups, the spouse's group membership predicted one's own group membership, which is not surprising given the interdependent nature of a marital relationship. On the other hand, initial individual income did not predict one's own nor the spouse's group membership in this sample, suggesting that individual income had limited influence on the development of marital satisfaction in this sample.

The main difference between covenant versus standard couples found in this study was that marriage type served as a significant predictor for husbands' group membership, where husbands in covenant marriages were more likely to be in the high stable group than husbands in standard marriages after considering other factors such as partner's membership, age, and income. Marriage type did not predict wives' group membership. Such a finding is aligned with DeMaris et al.'s (2012) observation that covenant husbands seemed to have a more positive evaluation of their marriage. The set-up of covenant marriages seems to provide husbands with some advantages in adjusting to marital changes over the newlywed years. Since about 33% of covenant couples had children at home after 3 years of marriage, our hypothesis is that the traditional gendered view shared by the many covenant couples put the primary child-rearing responsibilities on wives, which may have benefited husbands' adjustments to transitioning into parenthood. The other factor that was found to predict husbands' group membership, but not wives' group membership, was age, where the older the husband, the more likely he would be in the High Stable group. Future research is needed to understand why older husbands are more likely to be in the high stable group in this population.

4.1 | Strengths and limitations

The present study has multiple strengths. One is the large sample size, which is the largest to be used in group-based trajectory studies of newlywed couples (Williamson & Lavner, 2019), and the time span of 5 years. This is also the first study that examines the impact that obtaining an alternative marriage license can have on marital development. In addition, this is one of the first studies to examine both actor and partner effects using APIM and ordinal logistic regression methods together to account for both the dyadic nature of newlywed couples and the categorical outcome.

There are also some limitations to be considered. First, we used a sum of six marital satisfaction items developed by the authors from the original study (Nock et al., 2001), covering six different aspects of a marital experience. As this measurement of marital satisfaction is different from what other marital development studies used, the comparability of the results of this study to the findings of other studies is also limited. Another limitation of this study was that the assignment of group membership was based on the probability suggested by the result of GMM, which may have classification errors due to estimation bias. Additionally, all couples in the

present study were from Louisiana, United States. All couples were heterosexual, and the majority of the participants were White, Christian, and middle-class, a feature of samples found in most current marital satisfaction development studies. As a result, the generalizability of our findings to same-sex couples, couples of colors, non-religious couples, and couples of low socio-economic status are limited (e.g., Williamson et al., 2022). There are two existing studies on latent groups that used non-White couples, with one involving predominately Black couples (Birditt et al., 2012) and one involving predominately Hispanic couples (Williamson & Lavner, 2019). While some previous studies tested non-linear trajectories (Gosselin, 2015; Williamson & Lavner, 2019), the three-time points of data available in the present study did not allow us to test for non-linear trajectories. Finally, it is important to note that the identified trajectories are approximations, and within each trajectory group, some remaining variability among spouses is not captured (Nagin & Odgers, 2010).

Given the interdependent nature of marital satisfaction, some critics of marital development research suggest exploring subgroups based on couple-level data, rather than individual-level data, is more appropriate. However, treating husbands' and wives' data separately addresses the possibility of having different group trajectories and unmatched group assignments, a procedure that has been usefully applied in multiple couple studies (Birditt et al., 2012; Don & Mickelson, 2014; Lavner et al., 2012). Our analysis of husbands' and wives' group assignments revealed that about 35% of the couples experienced a mismatch. As couples with mismatched membership were not the focus of this study, we encourage future research to explore the impacts of couples having different marital development experiences.

4.2 | Practical implications

There are several practical implications of the present study. First, it is important that couples know that there are different trajectories and levels and, even more significantly, that an increase in relationship satisfaction is a rather rare phenomenon. For clinicians working with couples who are considering marriage, it is important to educate couples about the honeymoon-as-ceiling effect and how different trajectories of marital development can occur. At the same time, it is also important to educate couples who are considering covenant marriages that husbands and wives may have a different marital satisfaction trajectory and discuss potential contributing factors and coping responses. In addition, it is important for researchers who are interested in studying marital development to know the limitations of research comprising this literature. Specifically, it is important to know the utilization of different samples, measures, and statistical tools has produced findings that vary in the number of groups identified and the shape of their trajectories.

5 | CONCLUSION

The present study provides evidence for three subgroups that differ in how their marital satisfaction changes over the first 5 years of their marriage among covenant and standard couples. The subgroups are *High Stable*, *Medium Declining*, and *Low Declining*. We found that partners' memberships were able to predict each other, suggesting interdependence and co-development between husbands and wives. At the same time, covenant marriage was able to predict husbands being in the *High Stable* group but not for wives. As expected, wives and husbands in the *Low Declining* group experienced the highest divorce rate (about 22%). While the accumulative

divorce rate is lower in the covenant couples than the standard couples, the difference was not statistically significant. Also, divorce still occurred in the *High Stable* group. It is important for future research to consider features of marital quality other than marital satisfaction that may predict marital dissolution. We also encourage future research to continue to investigate marital development, particularly how matching or unmatching marital development groups can impact relational experiences.

DATA AVAILABILITY STATEMENT

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