Tracking Marital Attitude Change among High School Students and Predicting Later Union Transitions

A DISSERTATION
SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL OF THE UNIVERSITY OF MINNESOTA BY

Brian J. Willoughby

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

William J. Doherty
Adviser

August, 2009
# TABLE OF CONTENTS

LIST OF TABLES..............................................................................................................iii

LIST OF FIGURES............................................................................................................iv

I.  INTRODUCTION.........................................................................................................1

II. BACKGROUND.............................................................................................................2

    Couple Formation Patterns in Young Adulthood.......................................................2

    Marital Attitudes and Couple Formation Transition...............................................5

    Theoretical Framework..............................................................................................6

    Special Issues with Marital Attitude Research.......................................................7

III. STUDY 1..................................................................................................................11

    Scope of study..........................................................................................................11

    Methods.....................................................................................................................13

        Participants..........................................................................................................13

        Procedure..............................................................................................................13

        Measures..............................................................................................................14

        Data Analysis Plan...............................................................................................15

    Results......................................................................................................................16

        Marital Importance...............................................................................................16

        Expectations to Marry.........................................................................................20

        Marital Timing......................................................................................................21

IV. STUDY 2..................................................................................................................22

    Scope of study..........................................................................................................22

    Methods.....................................................................................................................24
LIST OF TABLES

1. Demographics characteristics of sample................................................47

2. Unconditional and conditional growth model summaries for marital attitudes……48

3. Logistic regression coefficients predicting the transition to cohabitation..........54

4. Logistic regression coefficients predicting the transition to marriage.............56
LIST OF FIGURES

1. Conceptual model for latent growth curve models ......................... 46
2. Average growth curve for general importance of marriage ............... 49
3. Average growth curves for relative importance of marriage .......... 50
4. Average growth curve for expectation to marry ........................... 51
5. Average growth curve for expected age of marriage .................... 52
6. Hazard probabilities for first transition to cohabitation ............... 53
7. Hazard probabilities for first transition to marriage .................... 55
As the pathways toward long-term couple formation become more complex and diverse, researchers have struggled to conceptualize and understand when and why young adults decide to marry. With marriage now delayed into the late 20’s for most young adults in the United States (Kreider, 2005), the transition to marriage has become increasingly varied as social norms surrounding marital timing have shifted. New committed relationship patterns involving cohabitation have also complicated the pathway from adolescent dating to committed marital relationships. Some couples now choose to cohabit instead of marrying or use cohabitation as a precursor to marriage.

As these new patterns continue to emerge, scholars have acknowledged that we still know little about the coupling behavior of young adults moving toward marriage (Busby, Holman & Taniguchi, 2001; Manning, Longmore, & Giordano, 2007) and marriage has not been on the forefront of young adulthood scholarship (Carroll et al., 2007). Research on this issue has focused on marital attitudes and marital plans. For example, scholars have recently begun to develop conceptual models to help explain how desired or expected marital timing might impact trajectories through young adulthood (Carroll et al., 2007). Despite these early attempts to understand how marital attitudes and plans impact trajectories and behaviors during young adulthood, no study to date has documented how marital attitudes change through adolescence and young adulthood and how those attitudes subsequently impact couple formation transitions. With the wide array of individual and couple well-being outcomes associated with the transition to marriage (Arnett, 1998; Donovan, Jessor, & Jessor, 1983; Miller-Tutzaner, Leonard, & Windle, 1991) and marital attitudes (Carroll et al., 2007; Willoughby & Dworkin, 2009),
more work is clearly needed in order to understand the complexities of marital attitude trajectories and couple formation behavior.

In this study I explore how marital attitudes change across adolescence as teens approach young adulthood. I then examine how the timing of marital and cohabiting transitions might be predicted based on how individuals orientate toward marriage in adolescence. Although the implications of marital attitudes have lately received attention from scholars, no research has been published on the stability of marital attitudes during the transition from adolescence to young adulthood, a developmental period when many values and beliefs shift. Previous research has suggested that attitudes toward marriage and cohabitation impact actual couple formation behavior (Clarkberg, Stolzenberg, & Waite, 1995; Sassler & Schoen, 1999). However, this research has focused on a narrow range of marital attitudes. This study breaks new ground by investigating changes in a range of marital attitudes across adolescence and implications for couple formation transitions later in young adulthood.

BACKGROUND

Couple Formation Patterns in Young Adulthood

Changing demographic trends over the last 50 years, such as a later age of first marriage (Kreider, 2005) and increased attendance in secondary education (McClanahan, 2004), have created what some view as a new period of development in young people’s lives. Some scholars have identified this period with terms such as “arrested adulthood” (Côté, 2000) and “emerging adulthood” (Arnett, 2000). One of the commonly identified features of emerging adulthood is the opportunity it provides young people for exploration and experimentation. Emerging adults often experiment in a series of
romantic relationships from their late teens until they marry, and their relationships are likely to include sexual intercourse and/or cohabitation (Martin, Martin, & Martin, 2001; Michael, Gagnon, Laumann & Kolata, 1995). Even though young adults no longer identify marriage as a necessary marker of adulthood (Nelson & Barry, 2005), understanding the transition to various long-term relationships during young adulthood in an important area of scholarly study. The transition to marriage is associated with numerous behavioral changes, particularly a decrease in health compromising risk-taking behavior (Arnett, 1998; Donovan, Jessor, & Jessor, 1983), and other union formation forms such as cohabitation have an important impact on relational and individual well-being (Dush, Cohan & Amato, 2003; Hansen, Moum & Shapiro, 2007).

The transition to marriage itself has undergone important changes in recent cohorts of young adults. Increased higher education attainment and other social changes have led to a delay of the marital transition for many young adults. A minority of young adults now marry in their early 20’s (Schoen, Landale, & Daniels, 2007). Young adults who do transition to marriage early often have lower educational trajectories or come from highly religious backgrounds (Uecker & Stokes, 2008). Recent research also suggests that young adult women who attend college delay making family transitions such as becoming a parent or marrying until later in the life course (Amato et al., 2008). These cultural changes have made the paths toward marriage more diverse and varied during young adulthood.

Another recent shift in couple formation patterns among young adults in the United States has been the increased prevalence of cohabitation (Bumpass & Lu, 2000; Heuveline & Timberlake, 2004). Most young married adults now have cohabitated prior
to marriage (Kennedy & Bumpass, 2008). While some young adults who choose to cohabit view cohabitation as an alternative to marriage, the research consensus has been that most individuals who enter cohabitation see it as precursor to marriage (Bumpass, Sweet & Cherlin, 1991). However, this view has been challenged by recent scholarship indicating that more young adults may view cohabitation as an alternative to singlehood (Manning & Smock, 2005). One alternative to this dichotomous categorization is that young adults who are educated or aspire to a higher standard of living are particularly prone to view cohabitation as a step toward marriage (Sassler & Cunningham, 2008), as compared to individuals with a lower socioeconomic background who may be more likely to view cohabitation as an acceptable alternative to marriage (Lichter, Qian, and Mellott 2006). Although this may explain some of the divergent findings regarding relational trajectories and cohabitation, there remains wide variability in how young adults sequence cohabitation, marriage and childbearing (Sassler & Cunningham, 2008).

These changing trends regarding cohabiting and marital transitions highlight only some of many generational changes that have taken place regarding coupling during the last fifty years. Researching pathways toward adulthood and couple formation has become an important priority for social scientists in this climate of changing relational norms. With the average age of first marriage in the United States now in the late 20’s and steadily increasing rates of cohabitation (Kennedy & Bumpass, 2008), social scientists have become interested in how behaviors and experiences during an extended period of young adulthood influence these later family formation patterns and outcomes. Researchers have speculated that these cultural and demographic shifts in couple formation may have important ramifications for individual and family development.
Developmental scholars have argued that these shifts have created unique challenges and opportunities for adolescents and young adults growing up in an increasingly eclectic world (Cote, 2000). Young adulthood is a time period characterized by many family transitions which will have a lasting effect on individual and relational well-being (Schoen, Landale, & Daniels, 2007) and one of the primary research priorities in this area is developing conceptual models through which young adults navigate the transition from adolescence to adulthood and family formation. Although many factors influence young adults’ decisions regarding union transition, attitudes toward marriage have become increasingly of interest to developmental and family scholars.

**Marital Attitudes and Couple Formation Transitions**

Research on the influence of marital attitudes on actual family formation transitions has been limited (Sassler & Schoen, 1999). A few older studies have found a link between positive attitudes toward marriage and couple formation behavior. Clarkberg and colleagues (1995) found that the importance placed on marriage during young adulthood increased the likelihood of a transition to marriage or cohabitation and lowered the probability that the transition was to a cohabiting union. Axinn and Thornton (1992) found similar results, suggesting that more positive attitudes toward marriage among men lowered the probably of transitioning into a cohabiting relationship while more positive attitudes toward marriage among women increased the probability of marriage.

Recent studies on the predictive nature of marital attitudes have largely focused on cohabiting partners or unmarried parents (Brown, 2000; Carlson, McLanahan & England, 2004; Gibson-Davis, Edin & McLanahan, 2005; Manning & Smock, 2002;
Waller and McLanahan, 2005). These studies have generally found that premarital partners who have explicit marriage plans or who place a priority on marriage are more likely to eventually transition into marriage. Although these studies have found that marital attitudes are predictive of later marital behavior, focusing on individuals already in a romantic relationship or who have already transitioned into parenthood omits a large portion of young adults. More specifically, although research suggests that an individual’s proximate marital beliefs influence short-term marital transitions, research has yet to fully understand how marital attitudes influence long-term couple transitions.

**Theoretical Framework**

Two studies (Carroll et al., 2007; Willoughby & Dworkin, 2009) have suggested that behaviors during young adulthood such as sexual behavior and alcohol use are influenced by attitudes toward marriage, leading some scholars to suggest that marital attitudes may shape the actual length and context of young adulthood. One such model, marital horizon theory (Carroll et al., 2007; Carroll et al., 2009), proposes that the combination of the importance individuals place on marriage, their criteria for marriage readiness and their desired marital timing will have an important impact on decisions regarding other behaviors such as risk-taking and dating behavior. This direct influence on individual behavior in turn will affect eventual transitions into couple relationship, employment and education. From this viewpoint, marital attitudes during young adulthood take an important role in shaping and altering pathways through young adulthood.

Marital horizon theory is used in the current study as a theoretical framework to frame the interpretation and discussion of results. Carroll et al. (2007) suggest that each
young adult has a unique marital horizon which, in part, helps create trajectories and pathways through young adulthood, including decisions to engage in potentially health compromising behaviors. Marital horizon theory has an implicit assumption that marital attitudes should predict important transitions during young adulthood such as couple formation. If marital horizons do help frame trajectories toward young adulthood, then marital attitudes and beliefs held earlier in life, before adolescents enter young adulthood, should influence transitions such as marriage which typically mark the end of young adulthood. To test this assumption, in this study I examine whether marital attitudes held as a high school senior, when adolescents are about to enter young adulthood, influence couple transition in their 20’s and early 30’s. Previous research has found marked differences between marriage and cohabitation in both relationship quality and stability (Brown, Sanchez, Nock & Wright, 2006; Dush, Cohan, & Amato, 2003; Teachman, 2003) and finding distinctive characteristics of young adults who choose to either cohabit or marry may yield important information about which couples and individuals are at risk for negative relational and personal outcomes.

*Special Issues in Marital Attitude Research*

Current research on marital attitudes is hampered by two limitations: a lack of consistent measurement and the assumption of attitudinal stability. These two limitations are important to address before a full understanding of how marital attitudes influence couple transitions can be achieved.

Research on marital attitudes has largely lacked both consistency and theoretical development. Differences across studies exist even regarding labeling the salient variable regarding individual and couple outcomes. Although most scholars looking at marital
attitudes focus on how individuals view and think about marriage as an institution, some scholars have focused instead on attitudes toward the specific transition of divorce (Kapinus, 2005; Martin & Parashar, 2006), arguing that views on divorce will be particularly important predictors of marital outcomes and dynamics.

Most studies that do focus on marital attitudes rely on one or two item measures that represent an eclectic variety of different constructs. Research on marital attitudes finds marital attitudes being defined as: the belief that marriage has intrinsic benefit (Axinn & Thornton, 1992; Oropesa, 1996; Sassler & Schoen, 1999); the general importance of marriage (Clarkberg et al., 1995); anticipated positive and negative changes that come with marriage (Dennison & Koerner, 2006); readiness for marriage (Carroll et al., 2009; Larson & Lamont, 2005); desire to marry (Mahay & Lewin, 2007); expectations regarding relationship characteristics in a marriage (Laner & Russell, 1994); unrealistic expectations regarding marriage (Fowers et al., 2001); expectations to marry (Gassanov, Nicholson & Koch-Turner, 2008; Peake & Harris, 2002); and expected age of marriage (Plotnick, 2007). This diversity reflects a lack of agreement about which marital attitudes and beliefs represent the core marital horizon for each individual.

While some selected studies have sought to utilize multiple items of marital attitudes to assess one dimension of marital attitudes or beliefs (see for example Blakemore, Lawton & Vartanian, 2005; Carroll et al., 2009; Larson et al., 1998; Ripley et al., 2005), few studies have sought to assess marital attitudes from multiple directions and then to see how differing aspects of marital attitudes might have differing associations with various outcomes. Some scholars (see Carroll et al., 2007; Hall, 2006) have argued that marital attitudes and beliefs are multifaceted constructs that must be examined from
multiple viewpoints to truly understand how each individual views and conceptualizes marriage within the context of life planning and goals. This study uses marital attitudes measures which primarily tap the constructs of marital importance and marital timing, two core factors in marital horizons theory. (Carroll et al., 2007).

The assumption that marital attitudes are static or unchanging is another limitation of current research on marital attitudes. For example, research by Cunningham and Thornton (2006) investigating the intergenerational transmission of marital attitudes from parents to children assumes that parental attitudes and marital quality help co-create marital beliefs and attitudes among young adults that might then influence that child’s future marital quality. The underlying assumption of this work is that once young adults internalize marital attitudes based on their family experience and personal values, these attitudes and belief remain stable across time. This assumption has largely gone unchallenged by scholars despite the lack of empirical evidence in its favor. Sassler and Schoen (1999) acknowledged that marital attitudes may change as educational and family goals shift across the lifespan but cite two studies in support of the notion that marital attitudes remain relatively stable among young adults. Yet one of the studies cited (Call & Heaton, 1991) features a sample of married couples, while the other (Axinn & Thornton, 1992) refers readers to an earlier study that actually shows that marital attitudes do change across time (Thornton, 1989).

Part of this confusion may come from not distinguishing between population trends and individual trends. While research has suggested that attitudes toward the importance of marriage and expectations toward marriage have remained relatively stable among recent cohorts (Thornton & Young-DeMarco, 2001), no study has explored how
marital attitudes change on the individual level. Although current generations of young adults may on average place a high value on marriage and have a high expectation to marry, individual variation and common changes across the lifespan may exist that have yet to be fully uncovered.

Although Carroll and others have acknowledged that plans and aspirations regarding marriage likely shift and change based both on developmental maturity and life experience, all the previous work done on marital attitudes in young adulthood has largely relied on cross-sectional investigations. With this reliance on static measures of marital attitudes, it is unknown how marital attitudes may change during young adulthood or earlier during adolescence. Understanding if and how marital attitudes change across time is an important consideration for future research as changes in marital attitudes over time may signify the need for more care to be taken in future work investigating marital attitudes. Therefore, before I investigate how marital attitudes in late adolescence influence couple formation in young adulthood; I first explore how marital attitudes might shift across adolescence. Late adolescence is an ideal time to investigate marital attitude change as it marks a transition period in young people’s lives where they are making important decisions regarding careers, education, and relationships. I investigate marital attitudes change across all four years of high school as adolescents prepare to enter young adulthood and begin to make future plans regarding family, education and career.

This dissertation encompasses two studies. In the first study I investigate how marital attitudes change across high school as adolescentes prepare to make the transition to young adulthood. In the second study I attempt to predict first transitions to both
cohabitation and marriage based on marital attitudes of adolescents about to transition out of high school.

STUDY 1

Scope of study

In the first study I posit whether how an individual thinks about marriage is malleable across adolescence as teenagers get relationship experience and move toward the independence and freedom that comes after high school graduation. Of course, it is possible that marital attitudes remain fairly consistent across adolescence. Perhaps most adolescents value marriage and expect to marry based on prevailing social norms and personal experiences have little impact on how an individual views marriage. However, to date this assumption has not been empirically tested.

Within this study I take a broad approach to measurement, investigating how five different measures of marital attitudes shift over time. This approach will allow for an investigation of if all marital attitudes operate in the same manner or if future research should be aware of differences that may appear depending on the type of measurement used. To address whether marital attitudes change across adolescence, latent growth curve models will be employed (McArdle & Epstein, 1987). This type of analysis allows for not only an examination of how marital attitude change over time but also allows for the modeling of variation across individuals based on covariates. I explore how four covariates—gender, race, family structure, and educational aspirations—influence both the initial level and change of marital attitudes across high school. All four of these variables have been shown to influence marital attitudes. The associations between marital attitudes and individual behavior tend to differ by gender (Carroll et al., 2007; Plotnick,
(Willoughby & Dworkin, 2009) and young adults with higher academic achievement tend to desire a later age of marriage (Plotnick, 2007). Family structure (Axinn & Thornton, 1993; Burgoyne & Hames, 2002) and ethnic background (Oropesa, 1996) have been shown to influence attitudes toward couple formation as well. Because of these previous associations, in this study I specifically seek to understand how these covariates potentially modify and explain what individual differences exist in all base marital attitudes and how those attitudes change across adolescence. Although many other factors likely influence the trajectory of marital attitudes, these basic demographic characteristics serve as a first step in the exploration of how individual background factors influence marital attitude change.

Due to the lack of previous research in this area and the exploratory nature of this study, no specific hypotheses were developed. Instead the purpose of this study is to fully explore how a range of marital attitudes might shift as adolescents enters young adulthood. In this study I address the following three broad research questions:

1. Do marital attitudes significantly change across the four years of high school?
2. Is there significant individual variation in the initial level and level of change of marital attitudes across high school?
3. Do gender, race, family structure, and educational aspirations influence the initial levels and change of marital attitudes across high school?
METHOD

Participants

Data for this project were taken from the Youth Development Study (YDS). The YDS is a longitudinal data set comprised of an initial random sample of 1,010 ninth graders enrolled in the public school system in St. Paul, Minnesota. Census comparisons have shown that St. Paul has social and economic indicators similar to national averages (Mortimer, 2003). Study 1 utilizes data from the first four waves of data (1988-1991) which assessed participants during each year of high school. The first wave of data was collected when most participants were between the ages of 14 and 15. Only participants who were not married at the end of wave four were included in the sample. Demographic information on the sample is summarized in Table 1.

Procedure

Data for the first four waves (1988-1991) were obtained by questionnaires completed by students in school classrooms. Students who were not available during the administration of the questionnaire completed the questionnaire by mail. Extensive contact information was obtained for each student to ensure that students who dropped out of school or those who transferred to another school were able to be tracked for subsequent data collection waves. Data for subsequent waves (1992-2004) were obtained through completed questionnaires mailed to each respondent. The original participation rate for the study was 67%. The retention rate as of 2004 was 75%. Previous studies investigating if study participation was linked to differences in family structure, race, education outcomes, and socioeconomic background found no differences (Finch, Shanahan, Mortimer, & Ryu, 1991).
Measures

Marital Attitudes

This study used several types of marital attitudes to get a more complete picture of any potential differences which might exist based on the type of marital attitudes measured. Three types of marital attitudes were assessed at all four time points.

Marital Importance. Marital importance was measured in three ways. First, the general importance an individual placed on marriage was assessed with one item which asked participants to rate how important “Marriage, relationship with my husband or wife” would be when they were an adult. This item was assessed on a four point scale (1 = not at all important; 4 = extremely important). Previous research has suggested that most young adults view marriage as important (Thornton & Young-DeMarco, 2001). This may produce low variability among variables assessing the general importance of marriage. Therefore, I also employed two new measures of the relative importance of marriage as suggested by Carroll and colleagues (2007). In addition to the item asking about the importance of marriage, participants were also asked how important career and friendships would be when they were an adult on the same four point scale. Difference scores were created by subtracting a participant’s score on the marital importance item from their score on the career importance and friendship importance items. This created two new measures, one measuring the relative importance of marriage compared to career and one measuring the relative importance of marriage compared to friendships. These measures ranged from –3 to 3 with higher numbers indicated that marriage was relatively more important compared to either career or friendships.
Expectations to marry. Expectations to marry were assessed by one item asking participants “Do you expect you will get married someday?” Responses ranged from 1 (No, I’m quite sure I won’t marry) to 5 (Yes, I am quite sure I will marry).

Expected age of marriage. Expected age of marriage was assessed by asking participants to indicate the oldest and youngest ages they expected to marry by. These two values were averaged to create an expected age of marriage.

Covariates

Educational aspirations were used as time-varying covariates and were assessed by one item where each participant was asked to indicate the level of education they thought they would finish. Responses ranged from 1 (less than high school) to 6 (Ph.D. or professional degree). This item was asked during all four waves of data collection.

Three other measures at T 1 were used as time invariant covariates in the model. Participants were asked to indicate their gender. Family structure was also assessed and coded as either 0 (living with two parent biological family) or 1 (not living with two parent biological family). Race was assessed by asking each participant to indicate which racial category they identified with the most. This variable was dummy-coded into a two category variable indicated with either 0 (white) or 1 (non-white).

Data Analysis Plan

In order to see how marital attitudes change over time among high school students, latent growth curve models (LGCM) were utilized to investigate both average growth curves across the sample population and individual variation in both the initial levels of marital attitudes and marital attitudes change across high school. Latent growth curve models allow the measurement of both within individual change across time and
between individual variations. Covariates were used to help explain and predict this variation. Across the four time points of measurement, each individual in the sample had an initial measurement level (intercept) and a rate of change (slope). LGCM allows for an examination of both the average intercept and slope and also allows for the investigation of any significant variation between individuals on either their initial level of marital attitudes or change across time.

Initial LGCM were run for each of the five marital attitudes (three measures of marital importance, one of expectations to marry, and one of expected age of marriage). These models were unconditional growth models signifying that no covariates were specified in the model. These models were inspected to determine initial levels of marital attitudes and change in those attitudes as participants approached young adulthood. Variation between individuals was also tested. Where significant variation existed, conditional models with covariates were added to the model to predict this variation.

Figure 1 outlines the general model specified with each marital attitude measured at each time point, three time invariant covariates (gender, race and family structure) and one time varying covariate (education aspirations). Education aspirations were used to predict marital attitudes at each corresponding time point. Missing data are assumed to be missing at random (MAR) and were handled using the full-info-max likelihood (FIML) function of Mplus. This method has been shown to be an effective way to handle incomplete data (Wothke, 2000). Overall, 133 individuals (14.5% of the original sample) had incomplete data. All covariance coverage statistics were above 60%.

RESULTS

Marital Importance
Marital importance was tested using all three measures; one of general importance and two of relative importance. Initial results testing a linear growth curve for the general importance of marriage indicated a well fitting model. Table 2 summarizes the model fit statistics for the unconditional and conditional models for each marital attitude. Participants beginning high school indicated they already placed a high importance on marriage (intercept = 3.19, t = 123.27, p < .001) and on average did show a significant positive growth over time (slope = .07, t = 6.72, p < .001) indicating that marriage became more important on average across high school. Figure 2 shows the average growth curve for the general importance of marriage across the sample. The slope and intercept were negatively associated with each other (r = -.03, t = -2.57, p < .05) suggesting that students who began high school placing a higher importance on marriage showed less growth across time. Because of the already high degree of importance being placed on marriage, this is likely due to a ceiling effect. Although the sample on average showed linear growth in their importance of marriage, significant between-individual variation existed in both initial attitudes (variance = .381, t = 11.18, p < .001) and rate of change (variance = .022, t = 3.54, p < .001).

Unconditional models for both measures of the relative importance of marriage showed similar results. Overall, models showed a good fit (see Table 2) although the model fitting linear growth of career versus marriage showed some suggestion of a mispecified model (χ²(6) = 19.17, p < .01). (Once covariates were added to the model fit statistics were in the acceptable ranges suggesting that this misspecification was a result of unspecified covariates.) Figure 3 shows the expected means and growth curve for the sample on both measures of relative marital importance. For the career/marriage item, it
was found that participants began high school with career being more important in relation to marriage (intercept = -.37, $t = -12.89, p < .001$) but marriage became relatively more important as they progressed through high school (slope = .10, $t = 8.39, p < .001$). Participants who began high school placing a greater relative importance on marriage showed a weaker growth over time ($r = -.05, t = -2.69, p < .05$). There was significant variance among participants in both their intercept (variance = .42, $t = 9.48, p < .001$) and slope (variance = .04, $t = 4.05, p < .001$).

Participants also indicated that they started high school expecting to place more importance on friends relative to marriage as adults (intercept = -.31, $t = -11.27, p < .001$). Over time marriage became more important relative to friends (slope = .14, $t = 11.95, p < .001$) across the sample. This growth was rapid enough so that by the end of high school, on average participants now expected to place more importance on marriage relative to friendships as adults. There was no significant association between participants’ intercept and slope. Significant variation between individuals was found for both intercepts (variance = .33, $t = 8.25, p < .001$) and slopes (variance = .04, $t = 3.92, p < .001$).

Conditional models with gender, race, family structure and educational aspirations as covariates showed good fit with all models. (Model fit statistics are summarized in Table 2.) Results for the general importance of marriage showed that gender was significantly associated with the initial importance placed on marriage ($\beta = -.21, t = -4.19, p < .001$). Females were more likely to expect to place more importance on marriage as an adult than males. Gender was not significantly associated with the slope, and family structure was not significantly associated with either the intercept or the
slope. Race was significantly associated with the intercept ($\beta = .28$, $t = 4.70$, $p < .001$) but not the slope. White participants placed a significantly higher initial importance on marriage at wave one than non-white participants. Educational aspirations were significantly and positively related to the general importance of marriage at each time point. This indicates that the more education the participants aspired too, the more likely it was that they would place a greater importance on marriage at each time point. This association grew gradually stronger from time point one ($\beta = .04$, $t = 2.64$, $p < .01$) to time point four ($\beta = .08$, $t = 4.35$, $p < .001$), suggesting a stronger link between educational aspirations and marital importance as participants approached high school graduation.

Results for the marriage/career measure showed that gender influenced the initial attitudinal level ($\beta = -.22$, $t = -3.82$, $p < .001$); females were more likely to initially expect to place more importance on marriage over career. Gender did not significantly influence the slope, and family structure was not significantly associated with either the intercept or the slope. Race was significantly associated with the intercept ($\beta = .28$, $t = 4.19$, $p < .001$) with white participants initially expecting to place more relative importance on marriage compared to career. Educational aspirations were significantly associated with the marriage/career item at time points one ($\beta = -.06$, $t = -2.79$, $p < .01$), two ($\beta = -.04$, $t = -2.34$, $p < .05$) and three ($\beta = -.03$, $t = -2.17$, $p < .05$); it was not significant at time point four ($\beta = -.02$, $t = -.96$, $p = .36$). These results indicate that the more education participants aspired too, the less important marriage was at almost each time point relative to career. This relationship weakened across time until no relationship existed at time four.
Results for the marriage/friends item showed similar results. Females were more likely to expect to place a greater initial importance on marriage relative to friends compared to males ($\beta = -.12, t = -2.15, p < .05$), but gender did not influence the slope and family structure had no effect on the initial relative importance of marriage or the change across time. Race had no affect on either the intercept or slope in this model. At time points one and two, educational aspirations had no association with the corresponding marital attitudes. Significant associations were found at time points three ($\beta = .04, t = 2.17, p < .05$) and four ($\beta = .05, t = 2.27, p < .05$), suggesting that as participants had higher educational aspirations at the later two time points, they expected to put a higher importance on marriage relative to their friends as adults.

*Expectations to Marry*

Figure 4 shows the average growth curve for expectations to marry. The trend line shows an almost perfectly linear growth. The linear model for this curve was a good fit ($\chi^2(5) = 4.57, p = .47$). Results were similar to those found for measures of marital importance. Participants indicated a high initial expectation to marry and over the course of high school this expectation grew significantly stronger (slope $= .08, t = 7.02, p < .001$). On average, as adolescents approached young adulthood they became more likely to expect to marry. Participants who had a higher initial expectation to marry had a lower growth across the four time points ($r = -.07, t = -4.74, p < .001$). There was also significant variation between individuals in the sample on both their initial expectations to marry (variance $= .60, t = 13.73, p < .001$) and their change in expectations during high school (variance $= .05, t = 6.57, p < .001$).
The conditional model with gender, race, family structure and educational aspirations was run to explain this individual variation. Overall this model continued to fit the data well. Gender was found to significantly influence initial expectation levels ($\beta = -0.17, t = -2.85, p < .01$) and the slope ($\beta = -0.04, t = -1.89, p < .05$). Females had an initial higher expectation to marry than males. Females also had less growth across the four time points than males. Similar to other measures of marital attitudes, it is likely this was due to a ceiling effect for females. Race was significantly associated with the intercept ($\beta = 0.16, t = 2.32, p < .05$) but not the slope. White participants had a higher initial expectation to marry at time one than non-white participants. Both family structure and educational aspirations had no significant influence on the growth model for expectations to marry.

**Marital Timing**

Results exploring how expected age of marriage shifts over high school found little variation across the waves of data. Figure 5 shows the average growth curve which suggests little change from year to year. Overall, the linear growth model showed an adequate fit to the data (see Table 2). Participants indicated an initial expected age of marriage at 25.4. The average slope was significantly negative (slope $= -0.11, t = -2.38, p < .05$) suggesting that expected age, on average, decreased across the four waves of data. However, the overall effect was quite small (the average expected age from time point one to four dropped by .3 years). There was significant variation on both the intercept (variance $= 6.7, t = 10.59, p < .001$) and slope (variance $= 0.48, t = 4.06, p < .001$).

Unconditional model results adding gender, race, family structure and educational aspirations to the model again showed that gender was associated with variation in the
growth model. Gender was significantly associated with the intercept ($\beta = .72, t = 2.93, p < .01$) and the slope ($\beta = .21, t = 2.27, p < .01$). Male participants were more likely at wave one to have a later expected age of marriage and were more likely to have a higher slope than females. Family structure and race had no significant association with both the intercept and the slope. Educational aspirations had a very strong association with expected age of marriage at time point one ($\beta = .36, t = 4.12, p < .001$), two ($\beta = .41, t = 6.59, p < .001$), three ($\beta = .43, t = 7.44, p < .001$) and four ($\beta = .42, t = 5.68, p < .001$). At each time point aspiring to go farther in school was associated with a later expected age of marriage.

**STUDY 2**

*Scope of Study*

Understanding the stability and covariates of marital attitudes is only one aspect of how marital attitudes influence the developmental and behavioral trajectories of adolescents and young adults. It is also important to consider how attitudes toward marriage during this period influence relational transitions and patterns later in the life course. Some previous research with limited assessment of marital attitudes has suggested that such a link might exist (Clarkberg et al., 1995; Sassler & Schoen, 1999) but making full use of five different measures of marital attitudes will allow for a more complex understanding of how different measures of marital attitudes might have differing influences on couple formation transitions.

The significance of marital attitude research in the last decade has been based on findings that these are predictive of later couple formation behavior (Clarkberg et al., 1995; Sassler & Schoen, 1999) and behavior before marriage (Carroll et al., 2007;
Willoughby & Dworkin, 2009). Studies prior to the rise of cohabitation generally found that more positive attitudes toward marriage were associated with an increased likelihood to marry. However, contemporary research that better captures the complexities of marital attitudes is needed to truly understand how marital beliefs held during adolescence might be predictive of later couple formation behavior. Clarkberg et al. (1995), the only study to look at how attitudes predict both marriage and cohabitation behavior, utilized one item asking participants to rate how important marriage was for them on a three point scale. Looking at how attitudes influence the transition to both cohabitation and marriage across five measures of marital attitudes will provide a more accurate assessment of how these attitudes impact later couple formation behavior.

In this study I examine the transitions to both marriage and cohabitation. I look at whether marital attitudes, in conjunction with other predictors previously found to be associated with couple formation transition, provide any significant prediction of the probability of making one of these union transitions. Although it is expected that marital attitudes will influence the transition into marriage, previous work has suggested that the transition into cohabitation may be less planned and more likely to occur due to proximate personal and environmental factors (Sassler, 2004). For this reason I expect that marital attitudes during late adolescence will have little impact on the transition to cohabitation later in the life course.

As in study 1, I model couple formation transitions with common control variables shown to influence couple formation patterns. I specifically focus on gender, race and religiosity. As previously noted, race (Schoen, Landale & Daniels, 2007) has an impact on the transition to both cohabitation and marriage. Research has also suggested
that religiosity impacts when young adults transition into marriage and cohabitation (Eggebeen & Dew, 2009).

This study will test the following hypotheses:

Hypothesis 1: The likelihood of transitioning to cohabitation will not be predicted by marital attitudes held during late adolescence.

Hypothesis 2: The likelihood of transitioning to marriage will be predicted by marital attitudes in adolescence, with more importance being place on marriage, a lower expected age of marriage and a higher expectation to marry increasing the likelihood of marriage.

METHOD

Participants

Data for this portion of the study will again utilize the Youth Development Study (YDS) described previously. For this portion of the study, waves 4 through 15 were utilized. Wave 4 was collected when participants were seniors in high school (1992) with wave 15 being collected in 2004. In total, data from 929 participants were included.

Measures

Union transitions. Each wave of data (4-15) contained life tables where participants indicated if they entered or exited marriage or cohabitation. These tables were used to construct variables for each year of data collection. These variables indicated that the participants either did not transition (0) or did transition (1) during each year of data collection. Once the transition occurred, subsequent years were coded as missing in order to censor each individual at the year of transition. Separate variables
were created for both the marriage transition and the transition to cohabitation. These yearly intervals serve as discrete time intervals which were coded to determine if each participant in the *risk set* transitioned at each year of data collection. Couple formation transitions were measured by both first marriage and first cohabitation.

*Controls.* In addition to the demographic measures described in Study one, *religiosity* was assessed by using one item assessing the importance of religion. Participants were asked “how important is religion in your life?” with responses ranging from 1 (*not important*) to 4 (*extremely important*).

*Marital Attitudes.* The marital attitudes variables were carried over from the first study. Importance of marriage, expectations to marry and expected age of marriage were all utilized. Participants’ attitudes at wave 4 were utilized as time invariant covariates and all three measures of marital importance (general importance, career/marriage, friendship/marriage) were used. In total, five measures of marital attitudes were used as covariates to predict the transition to first union formation. The use of marital attitudes at the end of high school allows for the estimation of if marital attitudes as adolescents are entering young adulthood influence couple formation transitions later in the life course.

*Data Analysis Plan*

Probabilities for transitioning into first union transitions were estimated using discrete time event history models. The risk set at each time point *t* for this sample constituted all participants who, up until time *t*, had not yet had a first union transition. Once a participant transitioned into either marriage or cohabitation, they were censored from the risk set. General models were first run to determine the population probabilities of transitioning into marriage or cohabitation at each age across the sample. After these
general patterns were examined, controls and marital attitudes covariates were added to the model to examine their effect on the probability of making union transitions. Due to the high correlations between the three importance of marriage items, analyses were run three times for each transition (marry and cohabitation) with one importance item used as a predictor. All analyses were conducted using Mplus software. Missing data was handled in an identical manner as study 1. All covariance coverage statistics exceeded .25.

RESULTS

First transition to cohabitation

Baseline event history models with no covariates were first run to examine the hazard probabilities for the sample. Figure 6 shows the hazard probabilities for cohabitation for each year of data collection. The risk of transitioning into cohabitation makes a sharp increase around 1994 when most participants would be 22-23. The proportion the sample transitioning into cohabitation in 1993 was 1.2% compared to 4.1% in 1994 and 18.1% in 1995. The risk of cohabiting remains fairly constant over the rest of the sample before slowly decreasing in the final few waves of the study.

Covariates were next added to the model in order to determine how marital attitudes held as late adolescents might influence the hazard probability of transition into cohabitation. Control measures of religiosity, gender and race were added along with all three measures of marital attitudes. Results are summarized in Table 3. All three measures of marital attitudes (with three measures of marital importance) did not significantly influence the probability of transitioning into a first cohabiting union. Two of the controls had a significantly impact on the probability of transition to cohabitation.
Religiosity had a significant negative relationship with the probability of transitioning into cohabitation. At any given time point, every one unit increase on the religiosity scale was associated with a 24% decrease in the likelihood of cohabitation. Gender also had an impact on the probability of transitioning into cohabitation. Males were 21% less likely to transition into cohabitation at each time point compared to females.

First transition to marriage

Figure 7 shows the risk trend across all years of the study for the first transition to marriage. Across the sample this hazard probability gradually increases peaking in 2003 where 15% of the at-risk population made a first transition into marriage.

Table 4 summarizes the results once covariates were added. After controls were added to the model two of the five marital attitudes had a significant impact on the event history model. Expected age of marriage had a significant negative relationship with the probability of transitioning to marriage \((e^{(β)} = .94, t = -2.82, p < .01)\). Each year later that late adolescents expected to get married resulted in a 6% decrease in their likelihood of transitioning into marriage at each time point. The general importance of marriage item was also significant \((e^{(β)} = 1.39, t = 2.60, p < .01)\). For each unit increase on the general importance of marriage scale for late adolescents, there was a corresponding 39% increase in the probability that they transitioned to marriage at each time point. None of the control variables had a significant impact on the model.

In order to illustrate these results, I consider a white, male late adolescent who expects to marry at 22 and places a high importance on marriage (four on the four point scale). Holding other variables at their mean, we can calculate the probability of this individual transitioning into marriage at his expected marriage age of 22 using the
baseline threshold probability at that time period and utilizing the beta coefficients for each covariate. Based on these estimates, this individual would have a 10.5% probability of transitioning into marriage at age 22. A similar individual with identical values but an expected age of marriage of 30 would only have a 5.8% probability of transitioning into marriage at age 22. Holding expected age of marriage constant (at age 22) and varying the importance expected to be place on marriage illustrates another significant change in the probability of marriage. At 22, an individual who places a high importance on marriage (4) would again have a 10.5% change of marrying while an individual who places a low importance on marriage (1) would have only a 3.9% probability of transitioning into marriage at that time period.

DISCUSSION

Marital Attitude Trajectories

Results from study one indicated that marital attitudes do not appear to be stable across high school. All three measures of marital importance, expected age of marriage and expectations to marry changed across the first four waves of the study. The growth in all five cases indicated a greater tendency to value marriage and a higher expectation to enter marriage as adolescents prepared to enter young adulthood. On average, as adolescents progressed through high school they placed more general and relative importance on marriage, had a lower expected age of marriage and also had a higher expectation to marry. It would appear that as adolescents begin to transition into young adulthood and leave high school, marriage becomes an increasing important aspect of their future life plans and goals.
It is especially interesting that not only did marriage become generally more important to adolescents; it also became relatively more important over time compared to both career and friends. This change was strong enough when comparing friendships with marriage that adolescents eventually expected marriage to become more important than friends on average by the last year of high school. Although previous research has suggested that marriage is almost universally important to young adults (Thornton & Young-DeMarco, 2001), this study is the first to show that marriage may become relatively more important compared to other life goals as adolescents transition into young adulthood. This was found in spite of the fact that most of these young adult did not expected to get married until their mid to late 20’s, almost ten years later than the last year of high school. Although the available data limited the ability to continue to track attitude change through young adulthood, future research should continue to investigate how marital attitudes change over time. As noted previously, current research on marital attitudes operates under the implicit assumption that marital attitudes are unchanging, an assumption which seems unlikely given the results of this study.

Gender differences were rather consistent across most measures of marital attitudes. Females were found to place more general and relative importance on marriage, have a higher expectation to marry and expect to marry earlier than men. Overall, this suggests that females tend to prioritize and plan for marriage more than men. This pattern has been found in other research (Blakemore, Lawton & Vartanian, 2005; Carroll et al., 2007; Plotnick, 2007), but results from this study suggest this gender differences are widespread and encompass many aspects of marital planning and expectations. Despite finding consistent differences by gender in the level of marital
attitudes, results looking at the change in marital attitudes found few differences between men and women. Although females may place a higher priority on marriage compared to males, males and females showed the same increases across time for most marital attitudes.

Education aspirations showed an interesting association with marital attitudes. Education aspirations were strongly tied to the expected timing of marriage, with more educational aspirations associated with a later expected age of marriage. This is likely due to the fact that young adults who aspire to more education, which likely involved post-secondary education, will likely wish to delay marriage until after their education is complete. Research has suggested that most college attending young adults feel that they need to be financially independent to be ready for marriage (Carroll et al., 2009). These young adults may put a higher priority on obtaining financial assets before marrying, leading to a later expected age of marriage.

Although higher education aspirations were found to be associated with a greater expectation to place importance on marriage as an adult, the pattern changed once relative marital importance was examined. Results suggested an opposite pattern when looking at the importance of marriage compared to career, finding that at most time points having more educational aspirations were associated with a lower relative importance of marriage compared to career. Results for the relative importance of marriage compared to friends found yet another pattern, with higher educational aspirations being associated with a expectation to place a higher importance on marriage compared to friends during the last two waves of data collection.
These results suggest that while in general, educational aspirations are associated with an increasing importance being placed on marriage, the effect it has on the relative importance of marriage varies. That the relative importance of marriage compared to career decreases might suggest that for adolescents who have high educational aspirations, the importance placed on career might be increasing at a greater rate compared to marriage. It is also possible that the importance placed on marriage for high aspiring adolescents is remaining stable while the importance placed on career is increasing as they begin plan for higher education and employment. These varying results suggest a complex interaction between educational plans and marital plans. It also suggests that future work on marital attitudes should consider not just how young adults view marriage but how marriage is viewed in conjunction with other major life goals.

The one marital attitude that showed the least amount of change was the expected age of marriage. Participants in the first wave of data indicated an expected age of marriage at around 25 years old. This expectation was largely unchanged across all four years of high school. Given the emerging adulthood research which indicates that most young adults in their 20's view 25 as the ideal age of marriage (Carroll et al., 2007; Plotnick, 2007), it seems that marriage at 25 may be a strong cultural norm in the United States. It is particularly striking that 25 was the expected age of marriage even among 14 and 15 year old participants at the first wave of data collection. With the average age of marriage being around 27 in the United States (U.S. Census Bureau, 2008), it is possible that 25 marks the age when young adults begin to transition their relational patterns and expectations toward a more marriage-centered perspective.
Predicting Couple Formation Transitions

Patterns of cohabitation and marriage in the later waves of the study seemed to indicate similar patterns as those found in previous studies. The transition to cohabitation was likely to happen earlier than marriage, with a peak in cohabitation found in the early 20’s. As participants entered their late 20’s and early 30’s there was a general decrease in the likelihood of a transition into cohabitation for the first time. Much of the recent research on cohabitation has suggested that most couples in the United States view and utilize cohabiting relationships as a precursor to marriage (Guzzo, 2009; Stanley, Rhoades & Markman, 2006). This seems evident as well from this study where participants in their early 20’s are likely beginning to form long-term relationships that might lead to marriage. As seen from the marriage hazard plot, the risk of transitioning to marriage steadily increases as participants enter their late 20’s and early 30’s. As participants begin to transition into marriage, the likelihood of transitioning into cohabitation is less severe.

Results for this study suggest that marital attitudes during late adolescence have little impact on the transition into cohabitation later in the life course. None of the five marital attitudes investigated had a significant impact on the survival probability for cohabitation. This would suggest that the decision regarding when to cohabitate might be made independently of marital plans and expectations during late adolescence. Although previous cross-sectional work has shown an association between cohabitation and marital plans (Gassanov et al., 2008), other research has shown that many couples enter cohabiting relationships due to pragmatic or financial reasons (Sassler, 2004). Because the transition to cohabitation can be sudden, it is not surprising that there would be little
association between adolescent marital attitudes and subsequent transitions into cohabitation during young adulthood. Previous findings of an association between marital plans and cohabiting behavior might be explained by raised expectations of marrying a particular cohabiting partner.

Controls used as covariates to predict union transition showed that gender and religion influenced the transitions to cohabitation while no control covariates influenced the transition into marriage. These results are consistent with findings from previous research. Females are more likely to transition into serious romantic relationships sooner than males, although this pattern was not found for marriage within this study. Religiosity has consistently been shown to be negatively associated with both attitudes toward and the transition to cohabitation (Eggebeen & Dew, 2009).

Marital attitudes from late adolescence did have an impact on the probability of transitioning to marriage. Two marital attitudes, expected age of marriage and the general importance of marriage, had an effect on the probability of transitioning into marriage. Specifically, late adolescents who expected to marry earlier and who placed a higher importance on marriage were more likely to transition into marriage at each time point during the study. The fact that the importance place on marriage impacts the probability of transitioning to marriage has been found in previous research (Clarkberg et al., 1995). Adolescents who place a high importance on marriage are likely to be more marriage-centered in their relationships and be actively preparing and expecting to marry. The fact that late adolescents’ expected age of marriage had a significantly affect on the probability of transitioning into marriage is an important finding for the study of young adulthood. When late adolescents expect to marry young, they are more likely to
transition into marriage during young adulthood and more likely to make that transition earlier than peers who do not expect to marry young.

Both of these findings lend support to marital horizon theory. How adolescents viewed marriage prior to high school graduation had a significant impact on their transition into marriage later in young adulthood. This suggests that young adults are on some level altering relational goals, patterns and practices based on their global views and expectations regarding marriage. Marriage has largely been left out of the discussion and research surrounding young adulthood (Carroll et al., 2007). Results from this study suggest that marriage, while not a common event during young adulthood, may have important ramifications for behaviors, decisions, and trajectories through young adulthood.

It is worth noting that although some marital attitudes significantly predicted the probability of transitioning to marriage, not all measures of marital attitudes proved valuable in the prediction of union formation. Expectations to marry had little influence on the actual transition to marry or cohabitation. This may be due to the fact that most adolescents and young adults expect to marry, resulting in little variation within the measure. Neither measure of the relative importance of marriage was significantly associated with the probability of marriage. Although results from study one suggest relative importance of marriage should be an important consideration of future researchers looking at how marital plans interact with life goals regarding education and career, it would seem that an individual’s global importance of marriage is the salient factor in terms of their actual relational planning and coupling behavior. These results are an important step forward for the measurement of marital attitudes and suggest that
nuances exist between measures of marital attitudes. Future research should carefully construct and select measures of marital attitudes based on their theoretical and empirical goals.

Limitations and Future Directions

Several limitations should be considered while interpreting the results of this study. Although significant change was found across most marital attitudes measured; most of these changes were small. Most variables were skewed because adolescents and young adults are prone to have positive views and attitudes toward marriage. Previous research has suggested that daters and engaged couples have idealized views of marriage prior to the marital transition (Bonds-Raacke et al., 2001), and it is likely that the low variability in the sample on items measuring marital importance and expectations reflect a large amount of homogeneity among the sample population.

Additionally, associations between race, education, family structure, religion, and marital attitudes found within this study are likely overly simplistic. As the first attempt at tracking marital attitude change and the prediction of subsequent union transitions, demographic covariates were often measured within this study in simple, dichotomous ways. Although results of this study form a foundation for future work, the actual ways in which covariates such as race and family structure influence the results found here are likely more complex and should be the focus of future work in this area. Dedicated studies focused entirely on understanding and exploring these complex relationships are needed before definite conclusions can be drawn.

There is also a need to expand the findings from the first study farther into the life course. Data limitations did not allow for the tracking of marital attitude change through
young adulthood. It is unknown if the changes found in late adolescence would continue through young adulthood or if marital attitudes become more static. Future research should explore how marital attitudes shift across young adulthood so that research on marital attitudes can adequately frame and develop appropriate research questions.

CONCLUSION

Results from this study clearly indicate the need for the further development and sophistication of measurement regarding marital attitudes. The five marital attitudes investigated in this study showed different patterns of change over time and different associations with covariates investigated. Future work in this area should continue to develop how marital attitudes might be measured as a collection of independent constructs.

The results of this study also establish a clear link between marital attitudes in adolescence and the transition to marriage later in the life course. The timing of marriage and cohabitation can have an important effect on individual and couple outcomes and results from this study suggest that this timing can be partially predicted much earlier in the life course. If marital attitudes can predict later couple formation transitions, researchers and policy makers will be able to better identify varying trajectories through young adulthood. With so many varied pathways developing through young adulthood, models which take a life course perspective and find predictive power in values or attitudes during adolescence could have importance ramifications for policy makers and scholars. Marriage and cohabitation have both been the focus of research across multiple disciplines and both are a stable of relational development in the United States.
Marital attitudes help shape and determine those transitions and should continue to be an important priority for couple and family formation scholars.
REFERENCES

Amato, P.R., Landale, N.S., Havasevich-Brooks, T.C., Booth, A., Eggebeen, D.J.,


Arnett, J.J. (2000). Emerging adulthood: a theory of development from the late teens


Blakemore, J.E., Lawton, C.A. & Vartanian, L.R. (2005). I can’t wait to get married:
Gender differences in drive to marry. *Sex Roles, 53*, 327-335.

179-184.

relationship assessments and expectations. *Journal of Marriage and the Family,
62*, 833-846.


Martin, S.P. & Parashar, S. (2006). Women’s changing attitudes toward divorce, 1974-


Figure 1. Conceptual model for Latent Growth Curve Models
Table 1. Demographic Characteristics of Sample

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Born in U.S.</td>
<td>.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two parent family</td>
<td>.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Income(^a)</td>
<td>5.9</td>
<td>2.4</td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) Income scale: 1 = under $5,000 to 13 = over $100,000.

\(n = 1,010\)
Table 2. Unconditional and Conditional Growth Model Summaries for Marital Attitudes

<table>
<thead>
<tr>
<th></th>
<th>Importance of Marriage</th>
<th>Relative Importance vs. Career</th>
<th>Relative Importance vs. Friends</th>
<th>Expectation to Marry</th>
<th>Expected Age of Marriage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unconditional Model</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\chi^2$(df)</td>
<td>2.42 (5)</td>
<td>17.17 (5)</td>
<td>5.36(5),</td>
<td>3.42(5),</td>
<td>10.48(5),</td>
</tr>
<tr>
<td>p</td>
<td>.79</td>
<td>&lt; .01</td>
<td>.37</td>
<td>.64</td>
<td>.06</td>
</tr>
<tr>
<td>CFI</td>
<td>1.0</td>
<td>.97</td>
<td>.99</td>
<td>1.0</td>
<td>.99</td>
</tr>
<tr>
<td>RMSEA</td>
<td>&lt; .01</td>
<td>.05</td>
<td>&lt; .01</td>
<td>&lt; .01</td>
<td>.03</td>
</tr>
<tr>
<td>SRMR</td>
<td>.02</td>
<td>.03</td>
<td>.02</td>
<td>.02</td>
<td>.05</td>
</tr>
<tr>
<td><strong>Conditional Model</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\chi^2$(df)</td>
<td>18.49(23),</td>
<td>27.13 (23)</td>
<td>18.86 (23),</td>
<td>17.91(23),</td>
<td>29.23(23),</td>
</tr>
<tr>
<td>p</td>
<td>.73</td>
<td>.25</td>
<td>.71</td>
<td>.76</td>
<td>.17</td>
</tr>
<tr>
<td>CFI</td>
<td>1.0</td>
<td>.99</td>
<td>1.0</td>
<td>1.0</td>
<td>.99</td>
</tr>
<tr>
<td>RMSEA</td>
<td>&lt; .01</td>
<td>.01</td>
<td>&lt; .01</td>
<td>&lt; .01</td>
<td>.02</td>
</tr>
<tr>
<td>SRMR</td>
<td>.02</td>
<td>.02</td>
<td>.01</td>
<td>.02</td>
<td>.04</td>
</tr>
</tbody>
</table>
Figure 2. Average growth curve for general importance of marriage
Figure 3. Average growth curves for relative measures of marital importance
Figure 4. Average growth curve for expectation to marry
Figure 5. Average Growth Curve for Expected Age of Marriage
Figure 6. Hazard probabilities for first transition to cohabitation
### Table 3. Logistic regression coefficients predicting the transition to cohabitation

<table>
<thead>
<tr>
<th>Variable</th>
<th>β</th>
<th>se</th>
<th>e(β)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-.23</td>
<td>.10</td>
<td>.79**</td>
</tr>
<tr>
<td>Race</td>
<td>-12</td>
<td>.14</td>
<td>.88</td>
</tr>
<tr>
<td>Religiosity</td>
<td>-.29</td>
<td>.06</td>
<td>.76**</td>
</tr>
<tr>
<td>Marital Expectations</td>
<td>.10</td>
<td>.11</td>
<td>1.11</td>
</tr>
<tr>
<td>Expected Age</td>
<td>.01</td>
<td>.02</td>
<td>1.01</td>
</tr>
<tr>
<td>General Importance[a]</td>
<td>.03</td>
<td>.09</td>
<td>1.03</td>
</tr>
<tr>
<td>Career/Marriage[a]</td>
<td>-.02</td>
<td>.07</td>
<td>.98</td>
</tr>
<tr>
<td>Friends/Marriage[a]</td>
<td>.07</td>
<td>.07</td>
<td>1.07</td>
</tr>
</tbody>
</table>

[a] the three measures of marital importance were run in separate models. All other estimates are those when general importance was used in the model. Estimates did not significantly change across the three measures.

** p < .01
Figure 7. Hazard probabilities for first transition to marriage
Table 4. Logistic regression coefficients predicting the transition to marriage.

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\beta$</th>
<th>se</th>
<th>$e^{(\beta)}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.20</td>
<td>.13</td>
<td>1.23</td>
</tr>
<tr>
<td>Race</td>
<td>.21</td>
<td>.19</td>
<td>1.24</td>
</tr>
<tr>
<td>Religiosity</td>
<td>.02</td>
<td>.07</td>
<td>1.02</td>
</tr>
<tr>
<td>Marital Expectations</td>
<td>.20</td>
<td>.14</td>
<td>1.23</td>
</tr>
<tr>
<td>Expected Age</td>
<td>-.07</td>
<td>.02</td>
<td>.94**</td>
</tr>
<tr>
<td>General Importance</td>
<td>.33</td>
<td>.13</td>
<td>1.39**</td>
</tr>
<tr>
<td>Career/Marriage</td>
<td>.10</td>
<td>.10</td>
<td>1.11</td>
</tr>
<tr>
<td>Friends/Marriage</td>
<td>.13</td>
<td>.08</td>
<td>1.29</td>
</tr>
</tbody>
</table>

\*the three measures of marital importance were run in separate models. All other estimates are those when general importance was used in the model. Estimates did not significantly change across the three measures.

** $p < .01$