Gender Differences in the Timing of First Marriage and Health Outcomes

Giuseppina Valle*
Doctoral Candidate, Department of Sociology
Florida State University

Heather Griffis
Doctoral Candidate, Department of Sociology
Florida State University

*Prepared for presentation at the 2011 Annual Meeting of the Population Association of America in Washington, DC. Please do not cite without permission from the authors. Phone: (585) 506-6557. Email: gvalle@fsu.edu

This research uses data from Add Health, a program project directed by Kathleen Mullan Harris and designed by J. Richard Udry, Peter S. Bearman, and Kathleen Mullan Harris at the University of North Carolina at Chapel Hill, and funded by grant P01-HD31921 from the Eunice Kennedy Shriver National Institute of Child Health and Human Development, with cooperative funding from 23 other federal agencies and foundations. Special acknowledgment is due Ronald R. Rindfuss and Barbara Entwisle for assistance in the original design. Information on how to obtain the Add Health data files is available on the Add Health website (http://www.cpc.unc.edu/addhealth). No direct support was received from grant P01-HD31921 for this analysis. Please direct correspondence to Giuseppina Valle, Department of Sociology,526 Bellamy Building, Florida State University, Tallahassee, FL 32306-2270. Email: gvalle@fsu.edu.

ABSTRACT

While research indicates that unions influence mental and physical well-being, little attention has been given to the timing of union formation and its implications on health outcomes during adolescence and young adulthood. In this paper, we investigate the timing of first marriage from adolescence through mid-adulthood and its effects on health and well-being of individuals by gender. Data for this research come from multiple waves of Add Health. We define early, normative, and late marriage as before age 23, between 23 and 27, and after age 27, respectively. We find preliminary evidence for poorer subjective health and higher levels of depression among women who marry early, although these effects are mediated by education and income. Furthermore, lower levels of depression are found among women who marry late. Among men, those who marry early show higher levels of depression. However, these effects are explained by education and income.

INTRODUCTION

Recent literature has investigated the health benefits and detriments of romantic relationships, including marriage and cohabitation. The majority of findings show that compared to unmarried individuals, those that are married report better physical and mental health (Aseltine and Kessler 1993; Wade and Pevalin 2004; Waite 1995; Waite and Gallagher 2000). However, the bulk of this literature does not look at this relationship during the most hectic times of romantic relationship formation—between adolescence and young adulthood. The transition from adolescence to mid-adulthood is marked by significant changes in social roles, the influence of parents or guardians, and increased independence. It is a time of identity formation and choices that may impact choices in later life, including potential lifetime partner selection (Arnett 2000).

This period of the lifecourse may be different for men compared to women in terms of transitions (such as partner selection), as well as subsequent health outcomes. Factors that influence transitions include family background, education, and income. On average, women tend to marry earlier than men (Goldscheider and Waite 1986), but recent trends in increasing educational attainment may delay marriage, particularly for women (Axinn and Thornton 1992). Men who expect to earn high incomes in the labor market tend to marry at later ages, but this does not hold for women (Bergstrom and Schoeni 1996). Although men tend to marry later than women, men tend to have better health outcomes associated with marriage than women (Williams and Umberson 2004).

While a majority of research confers that marriage is beneficial for the health of both men and women, we re-examine this assumption by investigating the age at which marriage occurs and whether its effects on health and health behaviors differ by gender. We first discuss the

changes in marriage timing over the past fifty years, and how these changes may influence the transition to marriage using a lifecourse framework. Then, we document previous research concerning the differing effects of marriage on health by gender. Following this, we describe the data and methods, as well as analysis. Finally, the conclusion documents limitations and future research.

CHANGES IN MARRIAGE TIMING

The process and formation of romantic relationships has changed dramatically in recent years. Since the mid-1900s, the age at first marriage has increased steadily for both men and women. According to the U.S. Census Bureau, in 1960, the median age at first marriage was 22.8 for men and 20.3 for women, whereas by 2004, these ages had risen to 27.4 years and 25.8 years, respectively (Johnson and Dye 2005). While more individuals are delaying marriage, it is not uncommon to marry at young ages: about 19 percent of 20-24 year olds in 2006 have ever been married (U.S. Census Bureau 2006). Using Add Heath, Uecker and Stokes (2008) found that 25 percent of women and 16 percent of men married before age.

These changing patterns in marriage can be due to many factors, including increasing educational attainment, changing gender norms, and cohabitation. Over the past fifty years, a record number of men and women are now college educated. Particularly for women, education increases the likelihood of marrying later in life (Goldstein and Kenney 2001; Oppenheimer, Blossfeld, and Wackerow 1995). Additionally, the expectation to marry early has lessened due to changing gender norms. Related to the increase in educational attainment, more women are participating in the paid labor force, perhaps wanting to solidify a stable career and thus waiting to marry. Lastly, the increasing incidence of cohabitation contributes to the delay of marriage. As

cohabitation becomes more socially acceptable, individuals tend to choose these unions as a precursor (or substitute, in some cases) to marriage, thus delaying the time of marriage.

However, for some individuals, early marriage remains an important pathway to adulthood and residential independence (Avery et al. 1992; Axinn & Thornton 1992). This partially depends on the labor market, as individuals who are employed and better off financially are more likely to make the decision to marry (Oppenheimer 1988). Particularly for men, the decision to marry may occur earlier if they are in positive economic situations (Oppenheimer 1988: Smock and Manning 1997).

THE LIFECOURSE, MARITAL TRANSITIONS AND HEALTH

The lifecourse perspective has played a prominent role in numerous studies focusing on marital trajectories over time (Elder 1998); however the bulk of research examining the marriage-health relationship focuses on current marital status (such as from married to non-married). From a life course perspective, the timing of transitions is likely to influence individual well-being. Lifecourse theory suggests that the disruption of early life processes, such as education, may have a negative effect on health later in life. Marriage at an early age is one transition that may compromise subsequent health outcomes during this crucial period of development. This disruption in the lifecourse may lead to poor outcomes as a result of foregoing other opportunities, such as education and work, and thus increasing the risk of remaining in a low socioeconomic position.

As individuals transition to adulthood, they begin to explore different lifestyles and behaviors which may compromise their health (Schuelenberg, Maggs, and Hurrelmann 1997). For example, during this time in young adulthood, individuals may participate in negative health behaviors such as smoking and drinking, which can lead to unfavorable outcomes later in life

(Harris 2010). These activities are primarily dominated by men during their adolescent and young adult years (Bachman et al. 1991); however, behavioral differences between men and women may be converging (Wallace et al. 2003). Additionally, transitioning to adult roles, such as finishing school and finding a job, can promote stress that may lead to negative mental health outcomes (Gore, Aseltine, Colton, and Lin 1997; Hagan and Foster 2003). These activities may influence marriage timing directly and indirectly. Individuals with poor health habits may be less desirable marriage partners. Similarly, individuals with poor health habits may be less likely to finish high school or college and gain employment, which are shown to be related to early marriage.

Although the link between marriage and health is plentiful, the timing of this transition and its association with health is less understood. Because marriage usually enhances health for individuals (i.e. Gove, Hughes, and Briggs Style 1983), one would expect that despite the age at which this transition occurs, health benefits should emerge. Studies examining older cohorts of individuals found that women who married at an early age (relative to those who married on time) had a greater risk for the onset of chronic health conditions (Dupre and Meadows 2007). In the same study, however, no effect was found for the timing of marriage for men, although this may be an artifact of the low occurrence of early marriage among men. Other research also indicates that early marriage is associated with poor psychological well-being (Forthofer et al. 1996).

Age at first marriage has been shown to be one of the strongest predictors of marital stability among couples (Monahan 1953; Moore and Waite 1981; Teachman 1983; Larson and Holman 1984). Studies indicated that marriages occurring before (Heaton 2002) and after (Bitter 1986; Booth and Edwards 1985) the normative age having the highest risks of dissolution.

Marrying at an early age is associated with a higher likelihood of marital instability and dissolution (Heaton 1991), due to higher levels of relationships problems (Booth and Edwards 1985; Teti and Lamb 1989), perhaps as a result of the decreased amount of time that individuals have to gain experience in relationships and in adult roles. As a consequence, union dissolution has been shown to lead to poorer health outcomes (Forthofer et al. 1996).

HEALTH AND GENDER DIFFERENCE IN MARRIAGE

The benefits of marriage are well documented. Compared to unmarried individuals, those who are married report significantly better health, both physically and mentally (Schoenborn 2004; Simon 2002; Waite and Gallaher 2000). While there is a debate in the literature as to whether the better health of married individuals is a cause or effect of marriage (Burman and Margolin 1992; Murray 2000; Waite 1995)—either healthier individuals tend to marry or marriage in itself improves one's health—most findings support the idea that marriage maintains or improves the health of individuals (Gove et al. 1990; Marks and Lambert 1998; Simon and Marcussen 1999).

However, the implications for the age at which individuals marry and the subsequent health effects differentiated by gender are less documented. For both men and women, the formation of romantic relationships is an important step during the transition to adulthood, particularly regarding marriage. There are many factors which influence the age at which individuals make this transition, and these factors are likely to differ for men and women. For example, research indicates that for men, economic resources such as income and employment stability accelerate the transition to first marriage, whereas high levels of educational attainment delay entry into marriage (Lloyd and South 1996). For women, social and economic conditions in the home influence their marital entry. Lichter and colleagues (1992) found that women who

grew up in a single-parent family during childhood marry at a later age compared to other women. Furthermore, young women aspiring to high levels of education are also likely to delay marriage (Axinn and Thornton 1992). There is less incentive for women to get married as the rise in women's employment has reduced the economic and emotional benefits of marriage for many women (McLanahan and Casper 1995).

While the factors of men and women differ regarding the transition into marriage, they are also likely to experience differences in the health outcomes for the age at which they enter these unions. However, no studies to our knowledge have examined such an association using young adults. Overall, men are more likely to confer health benefits regardless of union type. Support for this was found by Williams and Umberson (2004), who conclude that the transition into marriage subsequently increased self-reported health for men but not for women. This suggests that marriage has more positive effects for the well-being of men compared to women.

ADVANTAGES OF THIS STUDY

This study advances our knowledge in several ways. First, most of the research that examines the association between timing of first marriage and health use data from older adult populations. While examining the long-term health effects of age at first marriage is important, determining the short-term health implications of this transition to more recent cohorts will extend prior research.

Additionally, past research examining the effects on early marriage on health cannot account for the recent changes in marriage timing. While many older studies considered early marriage to be less than 19 (Lamb and Teti 1989; Forthofer et al. 1996), behaviors have changed such that both men and women marry later. This means that the category of early marries shifts to later ages compared to previous studies using older data. One result of this is delayed marriage

until the mid-to-late twenties, which we integrate into our study by with new standards for what researchers consider early marriage.

Lastly, some studies suggest that poorer health among those who marry early in the life course is a result of selection. Previous studies tend to rely on cross-sectional data, and thus they are unable to test whether selection is occurring. Because of the longitudinal nature of Add Health, we are able to control for previous health status to examine whether health differences are an artifact of unhealthy individuals choosing to marry at an earlier age.

DATA AND METHODS

Data for this research come from the National Longitudinal Study of Adolescent Health (Add Health), a nationally representative study of adolescents in grades 7 through 12 in the United States in 1995. This research primarily utilizes data collected from Waves III (conducted in 2001-02) and IV (conducted in 2007-08), although we use socio-demographic characteristics reported at Wave I and selected data from the Wave I Parental Questionnaire. During Wave I, respondents were between the ages of 12 and 21 years. By Wave IV, the respondents were between the ages of 24 and 32 years. This study comprises of individuals completing interviews at Waves I, III, and IV, resulting in an analytic sample of 2,125 women and 1,496 men.

MEASURES

Dependent Variables

Subjective health status is a continuous measure taken from Waves III and IV. We use Wave IV subjective health as the outcome variable and control for Wave III subjective health. Respondents were asked to rate their health in general on a five-point scale (5 = poor, 4 = fair, 3 = good, 2 = very good, and 1 = excellent). For the analyses, this variable was reverse coded so that higher values indicate better health.

Depression at Waves III and IV is calculated from a modified version of the Center for Epidemiologic Studies Depression Scale (CES-D). We use Wave IV depression as the outcome variable and control for Wave III depression. Respondents were asked to report how many days during the previous week the question applied to how he or she felt. These questions range from "feeling the blues" to "being bothered." For each question, 0 was assigned to never or rarely, 1 to sometimes, 2 to a lot of the time, and 3 to most of the time or all of the time during the previous week. Wave III includes 9 questions regarding depressive symptoms, and Wave IV includes 11 questions (Appendix 1 includes a complete list of depression questions for each wave). For Wave III depression, the reliability is .82, with scores ranging from 0-25. The depression index at Wave IV has a reliability of .85, with scores ranging from 0-33.

Independent Variables

Age at First Marriage is constructed from the respondents' reported year of birth and year of first marriage. This is calculated by subtracting the year of birth from the year of first marriage to find the age of first marriage. We separate age at first marriage into three categories: marriage before age 23, between 23 and 27, and after age 27, similar to the Uecker and Stokes (2008). We call the categories 'early,' 'normative,' and 'late' marriers, respectively.

Socio-demographic variables are taken from the Wave I In-home interview and include gender, age and race/ethnicity. *Gender* is self-reported and measured such that 1=male and 0=female. *Age* is measured in continuous years and is based on the respondent's birth date. Race/ethnicity is self-identified and is measured with four dummy indicators – non-Hispanic white, non-Hispanic black, Hispanic (of any race), and Asian – with non-Hispanic White as the reference category. Due to small sample sizes, individuals of other races were dropped in these analyses.

Respondent's parents' socioeconomic variables are taken from the Wave I Parental Questionnaire and include parental income and parental education. Five dummy variables were created to measure annual *parental income* (in thousands of dollars) – $15,000 or less, $16-$34,000, $35-$59,000, $60,000 or more, and missing income data – with $15,000 or less as the reference category. Highest *educational attainment achieved by a parent* (by either the mother or father) is measured with five dummy indicators – less than a high school degree, high school degree, some college, college degree, and missing education data – with an education of less than high school as the reference category.

Childhood family structure was constructed from Add Health's household roster at Wave I. Family structure is measured with four dummy variables – two-biological parent, married step-parent, single-parent, and non-parent families (i.e. grandparents, other relatives, group homes, etc.) – with two-biological parent families serving as the reference category throughout the analyses.

Respondent income and education is taken from Wave IV. Respondents were asked to report the highest level of education that they have achieved at the time of survey. *Education* is comprised of five categories: high school degree or less, vocational schooling, some college, college degree, and post-college degree, with high school degree or less serving as the reference category. For income, respondents were asked to report on their total household income. We divided income into four dummy variables: $20,000 or less, $20-$39,000, $40-$74,000, and $75,000 or more, with $20,000 or less serving as the reference category

Other respondent level variables at Wave IV include current marital status, current enrollment in school, and an indicator for whether the respondent has any children in the household. Current *marital status* is measured such that 1= currently divorced and 0 = currently

married. Respondents who are *currently enrolled in school* are compared to those who are not currently enrolled. Finally, respondents reporting at least one *child in the household* are compared to respondents with no children in the household at the time of the survey.

ANALYTIC STRATEGY

Using the Add Health, we examine the association between age at first marriage and health outcomes at Wave IV by gender. Following the conventions of previous studies that used Add Health (Boardman 2006; Heard, Gorman, and Kapinus 2008), we use ordinary least squares regression with subjective health.[1] Although this is a five category variable, it is relatively normally distributed. For depression, we use negative binomial, also similar to other studies (Fergusson, Horwood, Ridder, and Beautrais 2005; Reynolds and Baird 2010). Because depression is a count outcome, is heavily skewed left, and has an overdispersed variance, we chose the negative binomial over other models such as Poisson.

All tables display the weighted regression coefficients (for subjective health status) and incidence risk ratios (for depression) and standards errors for our models. For each set of models (five in total—women and men by subjective health and depression), we incorporate variables sequentially. First, for the base model, we include age at first marriage and control for current age and health at Wave III (either subjective health or depression, depending on the model). Model 2 includes race/ethnicity and childhood family structure. In Model 3, we add parents' income and education. In Model 4, respondent's income, education, and current marital status are included. And finally, in Model 5, the presence of children in the household and current enrollment in school are included.

[1] Analyses were replicated using ordered logistic regression models (results available upon request), and similar results were found.

All analyses account for the multistage, stratified, school-based, cluster sampling design of Add Health. Additionally, we also control for differential sampling probabilities among individuals by using the Add Health grand sample weights all of the analyses (Chantala and Tabor, 1999).

DESCRIPTIVE RESULTS

--- Table 1 here ---

Based on past research, we hypothesize that early marriage is associated with poorer health outcomes, but that differences among men and women will be present. Our analytic sample includes 3,621 respondents (2,125 women and 1,496 men) who completed interviews at Waves I, III, and IV. Table 1 shows the distribution of respondent background characteristics and health outcomes by age at first marriage among the full analytic sample by gender. Over half of respondents (51% for women and 59% for men) were married between ages 23-27 (normative). More women than men married before the age of 23 (early) (37% and 27%, respectively) whereas more men than women married after age 27 (late) (14% and 9%, respectively).

At Wave IV, both women and men rate their health between good and very good, on average, regardless of their age at marriage. However, for women, those who married early reported the poorest health (3.57). Among men, the poorest health was reported by those who married late (3.59). Turning to depression, we see that both women and men who married early report the highest level of depression (7.64 and 6.66, respectively), with women marrying early reporting the highest number of symptoms.

Among both women and men in this sample, a majority of respondents are non-Hispanic white, from a two-biological parent home, and a middle-class background (indicating by parental education and income). Additionally, for both women and men, at Wave IV most respondents

report having a least some college and an income between $40,000 and $74,000 across the ages at first marriage. Lastly, the likelihood of being currently divorced and having children in the household at Wave IV is highest among both men and women who marry early. Being currently enrolled in school is highest for women who married between ages 23-27 and for men who married before age 23.

MULTIVARIATE RESULTS

Self-Rated Health—Women

--- Table 2 here ---

The baseline model (Model 1) presented in Table 2 shows that women who marry early are significantly more likely to report lower levels of health compared to those who marry at a normative age. While those who marry late are also more likely to report lower levels of health, this finding is not significant. Controlling for race/ethnicity and childhood family structure does little to mediate the association between early marriage and poorer health (Model 2). However, in Model 2, we see that non-Hispanic black, Hispanic women, and women raised in non-traditional households report lower levels of health. While the inclusion of parent SES (Model 3) slightly mediates the relationship between early marriage and subjective health, early marries remain significantly more likely to report lower levels of health. However, parents' education and income are not significant predictors of respondents' health status.

Model 4 examines whether respondent SES mediates the association between age at first marriage and subjective health status. Results indicate that respondent education and income are significant predictors of health status, such that higher levels of education and income indicate higher levels of health. Furthermore, the inclusion of these characteristics mediates the relationship between early marriage and health to non-significance. Furthermore we see that

current marital status (Model 4), current enrollment in school, and the presence of children (Model 5) are not significant predictors of subjective health status for women.

--- Table 3 here ---

Self-rated health—Men

Table 3 shows the relationship between age at first marriage and subjective health for men. Across all models, age at first marriage is not significantly associated with health status. However, other predictors show to be significantly related to health status for men. Model 3 indicates that higher levels of parental education are associated with higher levels of subjective health for male respondents. Furthermore, respondent's own education significantly predicts health (Model 4). Specifically, compared to those with a high school degree or less, men with a college or post-college educations report higher levels of subjective health. Lastly, in Model 5, results indicate that having children present in the home is associated with lower levels of health.

Depression—Women

--- Table 4 here ---

In Table 4, we examine age at first marriage and depression among women. The baseline model (Model 1) indicates that compared to those who marry at the normative age, women who marry early have 12 percent higher odds of experiencing depressive symptoms. In contrast, those who marry late have a 15 percent lower odds of reporting depressive symptoms compared to their counterparts who marry at a normative age. This suggestions that while late marriage for women can have a protective effect on experiencing depression, early marriage is likely to be detrimental to one's mental health. This pattern holds throughout Models 2 and 3 when controlling for race/ethnicity, childhood family structure, and parent SES. Further, we see that living in a step-parent family (Model 2) and whose parents had a college education and earned

more than $35,000 (Model 3) increases women's odds of experiencing high levels of depression. Interestingly, women from single-parent families experience lower levels of depression, although this finding is only marginally significant (Model 3).

In Model 4, when controlling for respondent SES, we see findings similar to that of subjective health for women. Respondent education and income mediate the association between early marriage and depression to non-significance, suggesting that higher levels of education and income may buffer the negative aspects of early marriage on one's health. While the relationship was mediated for early marriage, the protective effect of late marriage on depression remains, such that women who marry later have 14 percent lower odds of experiencing depressive symptoms. Additionally, we see that women who are currently divorced have 10 percent higher odds of reporting depressive symptoms. Model 5 includes children in the house hold and current school enrollment. We find that being currently enrolled in school is associated with a 16 percent higher odds of experiencing depressive symptoms. Once again we see that the association between late marriage and depression becomes remains significant, suggesting that additional factors that are not captured in the model will be important to consider.

--- Table 5 here ---

Depression—Men

Table 5 shows the relationship between age at first marriage and depression for men. In the baseline model (Model 1), findings are similar to that of women, such that men who marry early have higher odds of experiencing depressive symptoms, although the effect for men is only marginally significant. Throughout all of the models in this table, men who marry late are no different on experiencing depressive symptoms than men who marry at a normative age. The association between early marriage and depression remain significant in Models 2 and 3, when

controlling for race/ethnicity, childhood family structure, and parent SES. In these models, we also see that non-Hispanic black men have higher odds of reporting depressive symptoms (Model 2) and men whose parents have a low to mid income have lower odds of experiencing depression (Model 3).

When adding respondent SES in Model 4, we see that the relationship between early marriage and higher depression is mediated to non-significance, suggesting that higher education and income among men may buffer the effect of early marriage on level of depression. Additionally, in Model 4 we find that men who are currently divorced have 23 percent higher odds of experiencing depressive symptoms, suggesting that the dissolution of marriage has negative implications for the mental well-being of men.

In Model 5, the lack of association between marriage timing and depression remains. However, whereas for women currently being enrolled in school increased the risk of experiencing depression, the opposite is true for men. Men who are currently enrolled in school have 12 percent lower odds of reporting depressive symptoms.

DISCUSSION

This article intended to inform the lack of research on marriage timing and health, and how this differs by gender. These results show that the relationship between marriage timing and health differs by health outcome, as well as gender.

We find that women who marry early, but not men, are more likely to report poorer subjective health. For women, this relationship is mediated by education and income. This shows that, for women, income and education may buffer the potentially negative health effects of early marriage. While only the highest level of income was significantly related to subjective health, any degree of education above high school (except for vocational school) significantly improved

health, revealing the importance of education. The insignificant association for men may mean that health effects of early marriage may manifest later in life, and thus we did not capture this with our young sample.

For depression, men who marry early and women who marry late report higher levels of depression. For women, those who marry late show lower levels of depression compared to the normative marriage age. Similar to subjective health, this relationship is mediated by education and income for both men and women. Despite the possible negative effects of marrying, individual's socioeconomic status may be important to buffer, for example, financial difficulties from marrying early. However, for women, education plays a larger role in buffering the effects of mental health, similar to subjective health status.

Overall, these findings indicate that the influence of marriage on health may play different roles in the lives of men and women. While marriage overall tends to be positive for individual's health in previous research, we find that this depends on the timing of marriage. For women, the effects of health are both physical and mental, but for men these effects manifest in only mental health.

Despite the strengths of this study, there are a few limitations that should be addressed. Although one of the strengths of this study involves the young sample that reflects current marriage trends, we acknowledge that we cannot capture trends of later marriage (30 years and older) because few of our respondents have aged to this point in the sample. While this may be a limitation, the significant findings of mental health benefits found among women who marry late are an indication that our findings are conservative. Additionally, although we collect variables from several waves of data, this study is mainly cross-sectional. Future waves of the Add Health will help to make longitudinal data analysis more feasible.

Since this study contributes to an area of research that is limited, there are several branches of future research to be explored. First, as the number of individuals who cohabit continues to increase, especially prior to marriage, it is important to look whether the same health effects of early marriage are similar to that of early cohabitors. A potential area of interest includes whether cohabitation influences the likelihood of marriage (and the timing of marriage), and how it is linked to any health effects. Also, it will be important to consider whether cohabitation before marriage may increase, decrease, or have not relationship to the health effects after marriage.

Additionally, the relationship between marriage timing and other health behaviors, such as smoking, drinking, and drug use should be explored. Although preliminary evidence in this study shows that these behaviors are not significantly related to health behaviors, the effects on health may not show in our relatively young sample. Using an integrative approach to health, including physical, mental, and behavioral indicators of health, is important to understand the future health and well-being of individuals across the life course (Harris 2010). Perhaps the effects of these behaviors manifest later in life, which we are not able to capture with the Add Health.

Despite these limitations, the findings from this study are important when considered the lack of research on marriage timing and health outcomes among young adults. Although the results of previous studies indicate that early marriage can be detrimental for individuals health (Dupre and Meadows 2007), the results found here suggest that the association between marriage and health works differently for men and women and these outcomes are salient even when examining marriage among young adults. While early marriage shows to be detrimental to the health of men and women, these effects are buffered by individual's education and income. With

increasing education attainment of the population combined with rising age at first marriage, this study shows that individuals who marry early and forego education (and the income benefits from it) are at additional risk for negative health outcomes.

References

Arnett, J. J. 2000. "Emerging Adulthood: A Theory of Development from the Late Teens Through the Twenties." *American Psychologist* 55: 469-480.

Aseltine, R.H. and R.C. Kessler. 1993. "Marital Disruption and Depression in a Community Sample." *Journal of Health and Social Behavior* 34: 227-251.

Avery, R., F. Goldscheider, and A. Speare Jr. 1992. "Feathered Nest/Gilded Cage: Parental Income and Leaving Home in the Transition to Adulthood." *Demography* 29: 375-388.

Axinn, W.G. and A. Thornton. 1992. "The Influence of Parental Resources on the Timing of the Transition to Marriage." *Social Science Research* 21: 61-85.

Bachman, J.G., J.M. Wallace, P.M. O'Malley, L.D. Johnston, C.L. Kurth, and H.W. Neighbors. 1991. "Racial/Ethnic Differences in Smoking, Drinking, and Illicit DrugUse among American High School Seniors, 1976-1989." *American Journal of Public Health* 81: 372-377.

Bergstrom, T. and R.F. Schoeni. 1996. "Income Prospects and Age-at-Marriage." *Journal of Population Economics* 9: 115-130.

Bitter, R.G. 1986. "Late Marriage and Marital Instability: The Effects of Heterogeneity and Inflexibility." *Journal of Marriage and the Family* 48: 631-640.

Boardman, J.D. 2006. "Self-Rated Health among U.S. Adolescents." *Journal of Adolescent Health* 38: 401-408.

Booth, A. and J. N. Edwards. 1985. "Age at Marriage and Marital Instability." *Journal of Marriage and the Family* 47: 67-75.

Burman, B. and G. Margolin. 1992. "Analysis of the Association Between Marital Relationships and Health Problems: An Interactional Perspective." *Psychological Bulletin* 112: 39-63.

Chantala, K. and J.W. Tabor. 1999. Strategies to Perform a Design-Based Analysis Using the Add Health Data. Found at: www.cpc.unc.edu/projects/addhealth/news.html.tab

Dupre, M.E. and S.O. Meadows. 2007. "Disaggregating the Effects of Marital Trajectories on Health." *Journal of Family Issues* 28: 623-652.

Elder, G.H. Jr. 1998. "The Life Course as Developmental Theory." *Child Development* 69: 1-12.

Fergusson, D.M., L.J. Horwood, E.M. Ridder, and A.L. Beautrais. 2005. "Subthreshold Depression in Adolescence and Mental Health Outcomes in Adulthood." *Archives of General Psychiatry* 62: 66-72.

Forthofer, M.S., R.C. Kessler, A.L. Story, and I.H. Gotlib. 1996. "The Effects of Psychiatric Disorders on the Probability and Timing of First Marriage." *Journal of Health and Social Behavior* 37: 121-132.

Goldscheider, F.K. and L.J. Waite. 1986. "Sex Differences in the Entry into Marriage." *American Journal of Sociology* 92:91–109.

Goldstein, J.R. and C.T. Kenney. 2001. "Marriage Delayed or Marriage Forgone? New Cohort Forecasts of First Marriage for U.S. Women." *American Sociological Review* 66: 506-519.

Gore, S., R. Aseltine, M.E. Colton, and B. Lin. 1997. "Life after high school: Development, stress, and well-being." In I. Gotlib & B. Wheaton (Eds.), *Stress and adversity over the life course* (pp. 197-214). New York: Cambridge University Press.

Gove, W.R., M. Hughes, and C.Briggs Style. 1983. "Does Marriage Have Positive Effects on the Psychological Well-being of the Individual?" *Journal of Health and Social Behavior* 24:122-31.

Gove, W.R., C. Briggs Style, and M. Hughes. 1990. "The Effect of Marriage on the Well-being of Adults: A Theoretical Analysis." *Journal of Family Issues* 11: 4-35.
Hagan, J, and H. Foster. 2003. "S/He's a Rebel: Toward a Sequential Stress Theory of Delinquency and Gendered Pathways to Disadvantage in Emerging Adulthood." *Social Forces* 82: 53-86.
Heard, H.E., B.K. Gorman, and C.A. Kapinus. 2008. "Family Structure and Self-Rated health in Adolescence and Young Adulthood." *Population Research and Policy Review* 27: 773-797.
Heaton, T.B. 1991. "Time-Related Determinants of Marital Dissolution." *Journal of Marriage and Family* 53: 285-295.
Heaton, T.B. 2002. "Factors Contributing to Increasing Marital Stability in the United States." *Journal of Family Issues* 23: 392-409.
Johnson, T. and J. Dye. 2005. Indicators of marriage and fertility in the United States from the American Community Survey: 2000 to 2003. Retrieved February 14, 2011, from http://www.census.gov/population/www/socdemo/fertility/mar-fert-slides.html.
Lamb, M. and D.M. Teti. 1989. "Socioeconomic and Marital Outcomes of Adolescent Marriage, Adolescent Childbirth, and Their Co-Occurrence." Journal of Marriage and Family 51: 203-212.
Larson, J.H. and T.B. Holman. 1994. "Premarital Predictors of Marital Quality and Stability." *Family Relations* 43: 228-237.
Lichter, D.T., D.K. McLaughlin, G. Kephart, and D.J. Landry. 1992. "Race and the Retreat from Marriage." *American Sociological Review* 57:781-99.
Lloyd, K.M. and S.J. South. 1996. "Contextual Influences on Young Men's Transition to First Marriage." Social Forces 74: 1097-1119.
Marks, N. F. and J.D. Lambert. 1998. "Marital Status Continuity and Change Among Young and Midlife Adults." *Journal of Family Issues* 19: 652-686.
McLanahan, S. and L. Casper. 1995. Growing diversity and inequality in the American family. *In State of the Union: America in the 1990s*, ed. Reynolds Farley, 2: 1-45. New York: Russell Sage Foundation.
Monahan, T.P. 1953. "Does Age at Marriage Matter in Divorce?" *Social Forces* 32: 81-87.
Moore, K. and L.J. Waite. 1981. "Marital Dissolution, Early Motherhood, and Early Marriage." *Social Forces* 60: 20-40.
Harris, K.M. 2010. "An Integrative Approach to Health." *Demography* 47: 1-22.
Murray, J.E. 2000. "Marital Protection and Marital Selection: Evidence from a Historical-Prospective Sample of American Men." *Demography* 37: 511-521.
Oppenheimer, V.K. 1988. "A Theory of Marriage Timing." *American Journal of Sociology* 94: 563-591.
Oppenheimer, V.K., H.P. Blossfeld, and A. Wackerow. 1995. United States of America. In Blossfled, H.P. (ed) *The New Role of Women: Family formation in modern societies*. Boulder: Westview. Pp. 150-173.
Reynolds, J.R. and C.L. Baird. 2010. "Is There a Downside to Shooting for the Stars?: Unrealized Educational Expectations and Symptoms of Depression." *American Sociological Review* 75: 151-172.
Schoenborn, C.A. 2004. Marital Status and Health: United States, 1999-2002. *Advance data form Vital and Health Statistics of the National Center for Health Statistics* 351: 1-32.

Schulenberg, J., J.L. Maggs, and K. Harrelman. 1997. Negotiating Developmental Transitions during Adolescence and Young Adulthood: Health Risks and Opportunities. In J. Schulenberg, J. L. Maggs, & K. Harrelman, (Eds.), *Health risks and developmental transitions during adolescence* (pp. 1–19). Cambridge, U.K.: Cambridge University Press.

Simon, R. 2002. "Revisiting the Relationships Among Gender, Marital Status, and Mental Health." *American Journal of Sociology* 107: 1065-1096.

Simon, R.W. and K. Marcussen. 1999. "Marital Transitions, Marital Beliefs and Mental Health." *Journal of Health and Social Behavior*. 40: 111-125.

Smock, P. and W. Manning. 1997. "Cohabiting Partners' Economic Circumstances and Marriage." *Demography* 34: 331-341.

Teachman, J.D. 1983. "Early Marriage, Premarital Fertility, and Marital Dissolution: Results for Blacks and Whites." *Journal of Family Issues* 4: 105-126.

Teti, D. M. and M.E. Lamb. 1989. "Socioeconomic and Marital Outcomes of Adolescent Marriage, Adolescent Childbirth, and Their Co-occurrence." *Journal of Marriage and the Family* 49: 499-506.

Uecker, J.E. and C.E. Stokes. 2008. "Early Marriage in the United States." *Journal of Marriage and Family* 70: 835-846.

U.S. Census Bureau. 2006. America's families and living arrangements, 2006. Retrieved February 14, 2011, from http://www.census.gov/population/www/socdemo/hh-fam/cps2006.html.

Wade, T.J. and D.J. Pevalin. 2004. "Marital Transitions and Mental Health." *Journal of Health and Social Behavior* 45: 155-170.

Waite, L.J. 1995. "Does Marriage Matter?" *Demography* 32: 483-507.

Waite, L.J. and M. Gallagher. 2000. *The Case for Marriage: Why married people are happier, healthier, and better off financially*. New York: Doubleday.

Wallace, J.M., J.G. Bachman, P.M. O'Malley, J.E. Schulenberg, S.M. Cooper, and L.D. Johnston. 2003. "Gender and Ethnic Differences in Smoking, Drinking, and Illicit Drug Use among American 8th, 10th, and 12th Grade Students, 1976-2000." *Addiction* 98: 225-234.

Williams, K. and D. Umberson. 2004. "Marital Status, Marital Transitions, and Health: A Gendered Life Course Perspective." *Journal of Health and Social Behavior* 45: 81-98.

Appendix 1: Depression Indicators

Wave III

1. You were bothered by things that usually don't bother you.
2. You could not shake off the blues, even with help from your family and your friends, during the past seven days.
3. You felt that you were just as good as other people, during the past seven days.
4. You had trouble keeping your mind on what you were doing, during the past seven days.
5. You were depressed, during the past seven days.
6. You were too tired to do things, during the past seven days.
7. You enjoyed life, during the past seven days.
8. You were sad, during the past seven days.
9. You felt like people disliked you, during the past seven days.

Wave IV

1. You were bothered by things that usually don't bother you.
2. You could not shake off the blues, even with help from your family and your friends, during the past seven days.
3. You felt that you were just as good as other people, during the past seven days.
4. You had trouble keeping your mind on what you were doing, during the past seven days.
5. You were depressed, during the past seven days.
6. You were too tired to do things, during the past seven days.
7. You felt happy.
8. You enjoyed life.
9. You felt sad.
10. You felt like people disliked you, during the past seven days.
11. In your day-to-day life, how often do you feel you have been treated with less respect or courtesy than other people?

Table 1: Weighted Percentages and Means of Socio-Demographic and Health Variables						
	Women (N=2,125)			Men (1,496)		
Age at First Marriage	<23	23-27	>27	<23	23-27	>27
First marriage	36.6	51.4	9.0	27.4	59.0	13.6
Mean SRH at Wave IV	3.57	3.73	3.73	3.7	3.77	3.59
Mean Depression at Wave IV	7.64	6.69	5.71	6.66	5.87	5.95
Characteristics at Wave I						
Race						
White	81.5	78.4	68.2	78.2	78.4	76.2
Black	6.5	8.2	12.3	6.4	9.4	12.8
Hispanic	10.7	9.6	14.8	13.5	10.0	8.3
Asian	1.4	3.8	4.7	1.9	2.2	2.7
Family Structure						
Two-Biological Parent	51.9	62.9	50.1	55.5	62.2	59.1
Step-Parent	21.4	15.5	20.3	16.4	18.4	22.6
Single-Parent	21.1	19.6	27.0	20.5	17.1	13.8
Other	5.5	2.0	2.5	7.6	2.2	4.6
Parent Education						
Less than HS	12.6	9.6	11.8	12.7	9.1	6.7
HS Degree	38.6	28.2	29.1	31.5	28.0	26.4
Some College	24.1	20.6	24.0	22.2	22.1	24.0
College	21.5	39.2	31.0	25.2	36.1	37.1
Missing Education Data	3.2	2.5	4.1	8.0	4.7	5.9
Parent Income						
$15,000 or less	17.4	12.4	10.8	14.3	14.3	14.2
$16,000-$34,000	29.0	20.7	20.5	31.9	21.3	26.5
$35,000-$59,000	28.2	28.9	36.4	26.2	30.5	22.8
$60,000+	14.7	28.2	22.5	16.2	25.9	30.5
Missing Income Data	10.7	9.8	9.7	11.4	8.0	6.1
Characteristics at Wave IV						
Respondent Education						
HS or less	29.7	14.3	12.2	34.6	25.6	28.3
Vocational School	10.2	9.7	8.8	15.4	11.2	11.5
Some College	42.2	34.0	29.9	41.3	33.8	30.0
College	11.8	23.3	27.6	4.3	18.1	16.6
Post-College	6.1	18.7	21.5	4.4	11.4	13.5
Respondent Income						
<$20,000	13.1	7.1	8.8	7.3	3.7	3.2
$20,000-$39,000	20.3	14.2	14.6	22.2	12.6	16.1
$40,000-$74,000	38.8	42.4	26.4	36.2	44.0	44.2
$75,000+	27.9	36.2	50.2	34.4	39.7	36.4
Currently Divorced	33.6	12.0	2.5	36.7	11.6	5.6
Currently Enrolled in School	13.0	18.2	11.7	12.5	10.8	9.7

Children in Household	83.9	60.9	50.5	83.2	60.0	51.6
N	819	1,076	230	383	860	253

Table 2: OLS Regression of Age at First Marriage on Subjective Health (Women)

	Model 1		Model 2		Model 3		Model 4		Model 5	
Timing of Marriage										
Early	-0.160	**	-0.137	**	-0.114	*	-0.039		-0.031	
	(0.054)		(0.053)		(0.052)		(0.057)		(0.059)	
Normative (ref)										
Late	-0.025		0.014		0.010		-0.043		-0.054	
	(0.063)		(0.061)		(0.060)		(0.062)		(0.062)	
Age at Wave IV	-0.012		-0.007		-0.007		-0.005		-0.002	
	(0.016)		(0.016)		(0.015)		(0.014)		(0.015)	
SRH at Wave III	0.424	**	0.407	**	0.396	**	0.345	**	0.347	**
	(0.030)		(0.030)		(0.031)		(0.029)		(0.030)	
Race										
White (ref)										
Black			-0.214	**	-0.183	**	-0.208	**	-0.203	**
			(0.068)		(0.070)		(0.072)		(0.072)	
Hispanic			-0.275	**	-0.233	*	-0.259	*	-0.261	*
			(0.102)		(0.107)		(0.109)		(0.109)	
Asian			-0.007		0.018		0.044		0.043	
			(0.177)		(0.186)		(0.181)		(0.181)	
Family Structure at Wave I										
Two-biological parent family (ref)										
Married step-parent family			-0.179	**	-0.178	**	-0.160	**	-0.155	**
			(0.062)		(0.060)		(0.055)		(0.056)	
Single-parent family			-0.149	*	-0.100		-0.096		-0.091	
			(0.060)		(0.065)		(0.064)		(0.064)	
Non-parent family			-0.294	+	-0.184		-0.135		-0.13	
			(0.153)		(0.154)		(0.147)		(0.148)	
Parents' Education										
Less than high school (ref)										
High School degree					-0.056		-0.079		-0.079	
					(0.082)		(0.084)		(0.084)	
Some College					0.130		0.055		0.052	
					(0.082)		(0.087)		(0.086)	
College					0.094		-0.066		-0.071	
					(0.089)		(0.089)		(0.089)	
Parents' Education Missing					-0.111		-0.128		-0.125	
					(0.162)		(0.161)		(0.161)	

Parental Income						
≤ $15,000 (ref)						
$16,000-$34,000	0.027		-0.033		-0.029	
	(0.085)		(0.084)		(0.084)	
$35,000-$59,000	0.105		-0.002		0.003	
	(0.094)		(0.092)		(0.092)	
$60,000+	0.083		-0.078		-0.075	
	(0.085)		(0.089)		(0.089)	
Parental Income Missing	0.027		-0.072		-0.067	
	(0.096)		(0.089)		(0.090)	
Respondent Education						
High School or less (ref)						
Vocational			0.067		0.066	
			(0.112)		(0.112)	
Some College			0.206	**	0.208	**
			(0.073)		(0.074)	
College			0.511	**	0.499	**
			(0.078)		(0.079)	
Post-College			0.466	**	0.448	**
			(0.092)		(0.098)	
Respondent Income						
≤ $20,000 (ref)						
$20,000-$39,000			0.095		0.095	
			(0.089)		(0.090)	
$40,000-$74,000			0.100		0.096	
			(0.090)		(0.090)	
$75,000+			0.265	**	0.256	**
			(0.092)		(0.092)	
Currently Divorced			0.017		0.012	
			(0.061)		(0.062)	
Children in Household					-0.056	
					(0.053)	
Currently Enrolled in School					-0.009	
					(0.069)	

R^2	0.1765	0.1991	0.2095	0.2578	0.2585

Note: Standard Errors in Parentheses[2]

+p≤.10; *p≤.05; **p≤.01

[2] Region, Urbanicity, and Marital Duration were tested as possible mediators in each of the analyses (results available upon request). Due to space and non-significance of these variables, we did not include them in the models.

Table 3: OLS Regression of Age at First Marriage on Self-Reported Health (Men)

	Model 1		Model 2		Model 3		Model 4		Model 5	
Timing of Marriage										
Early	-0.031		-0.032		-0.010		0.036		0.065	
	(0.060)		(0.059)		(0.060)		(0.063)		(0.063)	
Normative (ref)										
Late	-0.102		-0.105		-0.108		-0.111		-0.132	
	(0.080)		(0.080)		(0.076)		(0.080)		(0.082)	
Age at Wave IV	-0.018		-0.014		-0.010		-0.010		-0.003	
	(0.020)		(0.021)		(0.020)		(0.020)		(0.020)	
SRH at Wave III	0.421	**	0.417	**	0.405	**	0.388	**	0.392	**
	(0.033)		(0.034)		(0.032)		(0.033)		(0.033)	
Race										
White (ref)										
Black			-0.091		-0.131		-0.103		-0.114	
			(0.089)		(0.085)		(0.087)		(0.087)	
Hispanic			-0.110		-0.021		-0.014		-0.024	
			(0.087)		(0.080)		(0.076)		(0.074)	
Asian			-0.182		-0.197		-0.206		-0.215	+
			(0.118)		(0.124)		(0.127)		(0.115)	
Family Structure at Wave I										
Two-biological parent family (ref)										
Married step-parent family			-0.065		-0.018		0.010		0.021	
			(0.062)		(0.066)		(0.064)		(0.066)	
Single-parent family			-0.050		0.000		0.013		0.026	
			(0.060)		(0.095)		(0.095)		(0.096)	
Non-parent family			0.049		0.139		0.147		0.149	
			(0.153)		(0.133)		(0.129)		(0.131)	
Parents' Education										
Less than high school (ref)										
High School degree					0.337	**	0.327	**	0.317	**
					(0.098)		(0.095)		(0.095)	
Some College					0.474	**	0.436	**	0.427	**
					(0.105)		(0.104)		(0.105)	
College					0.52	**	0.446	**	0.431	**
					(0.107)		(0.111)		(0.111)	
Parents' Education Missing					0.155		0.173		0.164	
					(0.156)		(0.155)		(0.155)	

Parental Income			
≤ $15,000 (ref)			
$16,000-$34,000	-0.160 +	-0.155 +	-0.154 +
	(0.095)	(0.092)	(0.091)
$35,000-$59,000	-0.060	-0.084	-0.079
	(0.089)	(0.090)	(0.086)
$60,000+	-0.157	-0.193 +	-0.192 +
	(0.103)	(0.104)	(0.101)
Parental Income Missing	0.123	0.109	0.100
	(0.116)	(0.116)	(0.114)
Respondent Education			
High School or less (ref)			
Vocational		0.074	0.063
		(0.100)	(0.101)
Some College		0.049	0.047
		(0.082)	(0.081)
College		0.332 **	0.286 **
		(0.099)	(0.103)
Post-College		0.211 +	0.177
		(0.115)	(0.120)
Respondent Income			
≤ $20,000 (ref)			
$20,000-$39,000		0.097	0.104
		(0.143)	(0.145)
$40,000-$74,000		0.105	0.113
		(0.150)	(0.150)
$75,000+		0.102	0.097
		(0.143)	(0.145)
Currently Divorced		-0.009	-0.013
		(0.072)	(0.074)
Children in Household			-0.149 *
			(0.061)
Currently Enrolled in School			-0.119
			(0.086)

R^2	0.1709	0.1752	0.2115	0.2262	0.2319

Note: Standard Errors in Parentheses

+p≤.10; *p≤.05; **p≤.01

Table 4: Negative Binomial Regression of Age at First Marriage on Depression (Women)

	Model 1		Model 2		Model 3		Model 4		Model 5	
Timing of Marriage										
Early	1.12	**	1.10	**	1.07	+	1.02		1.04	
	(0.043)		(0.053)		(0.040)		(0.040)		(0.041)	
Normative (ref)										
Late	0.85	*	0.84	*	0.840	*	0.86	*	0.86	*
	(0.057)		(0.061)		(0.057)		(0.061)		(0.062)	
Age at Wave IV	1.02		1.02		1.01		1.01		1.02	
	(0.013)		(0.016)		(0.013)		(0.013)		(0.013)	
Depression at Wave III	1.07	**	1.07	**	1.06	**	1.06	**	1.06	**
	(0.004)		(0.030)		(0.005)		(0.005)		(0.004)	
Race										
White (ref)										
Black			1.08		1.04		1.03		1.02	
			(0.072)		(0.067)		(0.059)		(0.061)	
Hispanic			1.05		0.97		0.99		1.00	
			(0.072)		(0.068)		(0.069)		(0.071)	
Asian			0.99		0.97		0.95		0.95	
			(0.084)		(0.084)		(0.082)		(0.081)	
Family Structure at Wave I										
Two-biological parent family (ref)										
Married step-parent family			1.16	**	1.16	*	1.140	*	1.14	*
			(0.068)		(0.069)		(0.066)		(0.065)	
Single-parent family			1.00		0.920	+	0.92		0.92	+
			(0.048)		(0.047)		(0.047)		(0.046)	
Non-parent family			1.23		1.04		1.03		1.03	
			(0.160)		(0.122)		(0.120)		(0.114)	
Parents' Education										
Less than high school (ref)										
High School degree					0.94		0.96		0.96	
					(0.064)		(0.061)		(0.062)	
Some College					0.92		0.96		0.95	
					(0.074)		(0.074)		(0.076)	
College					0.84	*	0.89		0.88	+
					(0.064)		(0.066)		(0.066)	
Parents' Education Missing					1.19		1.22		1.24	+

	(0.145)		(0.151)		(0.152)	
Parental Income						
≤ $15,000 (ref)						
$16,000-$34,000	0.90		0.95		0.94	
	(0.058)		(0.062)		(0.062)	
$35,000-$59,000	0.83	**	0.90	+	0.9	+
	(0.054)		(0.057)		(0.057)	
$60,000+	0.82	*	0.89		0.89	
	(0.065)		(0.066)		(0.067)	
Parental Income Missing	0.83	*	0.88	+	0.89	
	(0.064)		(0.064)		(0.065)	
Respondent Education						
High School or less (ref)						
Vocational			1.06		1.06	
			(0.073)		(0.072)	
Some College			0.90	*	0.87	**
			(0.042)		(0.039)	
College			0.86	**	0.84	**
			(0.046)		(0.045)	
Post-College			0.93		0.88	*
			(0.061)		(0.057)	
Respondent Income						
≤ $20,000 (ref)						
$20,000-$39,000			0.91		0.91	
			(0.075)		(0.074)	
$40,000-$74,000			0.82	*	0.83	*
			(0.070)		(0.069)	
$75,000+			0.81	**	0.81	**
			(0.063)		(0.061)	
Currently Divorced			1.10	+	1.09	
			(0.058)		(0.059)	
Children in Household					0.94	
					(0.042)	
Currently Enrolled in School					1.16	**
					(0.052)	

Note: Standard Errors in Parentheses
+p≤.10; *p≤.05; **p≤.01

Table 5: Negative Binomial Regression of Age at First Marriage on Depression (Men)

	Model 1		Model 2		Model 3		Model 4		Model 5	
Timing of Marriage										
Early	1.10	+	1.11	+	1.11	+	1.00		1.01	
	(0.059)		(0.063)		(0.060)		(0.057)		(0.058)	
Normative (ref)										
Late	1.00		1.01		1.00		1.00		1.00	
	(0.073)		(0.072)		(0.069)		(0.068)		(0.068)	
Age at Wave IV	1.00		1.00		1.00		1.00		1.00	
	(0.018)		(0.018)		(0.018)		(0.017)		(0.018)	
Depression at Wave III	1.08	**	1.07	**	1.07	**	1.07	**	1.07	**
	(0.008)		(0.008)		(0.008)		(0.008)		(0.008)	
Race										
White (ref)										
Black			1.25	**	1.23	**	1.20	*	1.20	*
			(0.107)		(0.103)		(0.096)		(0.097)	
Hispanic			1.07		1.03		1.05		1.06	
			(0.064)		(0.060)		(0.066)		(0.067)	
Asian			0.91		0.93		1.00		1.01	
			(0.133)		(0.138)		(0.150)		(0.151)	
Family Structure at Wave I										
Two-biological parent family (ref)										
Married step-parent family			0.99		0.95		0.92		0.93	
			(0.068)		(0.065)		(0.062)		(0.062)	
Single-parent family			1.03		0.970		0.92		0.93	
			(0.075)		(0.075)		(0.070)		(0.070)	
Non-parent family			1.06		1.03		1.02		1.03	
			(0.148)		(0.169)		(0.172)		(0.171)	
Parents' Education										
Less than high school (ref)										
High School degree					0.94		0.95		0.94	
					(0.074)		(0.080)		(0.079)	
Some College					0.92		0.94		0.94	
					(0.084)		(0.090)		(0.088)	
College					0.91		0.95		0.96	
					(0.068)		(0.076)		(0.076)	
Parents' Education Missing					1.06		1.05		1.05	
					(0.131)		(0.134)		(0.134)	

Parental Income						
(≤ $15,000)						
$16,000-$34,000	0.90		0.89		0.90	
	(0.076)		(0.075)		(0.076)	
$35,000-$59,000	0.85	+	0.85		0.86	
	(0.080)		(0.083)		(0.083)	
$60,000+	0.89		0.91		0.91	
	(0.091)		(0.093)		(0.092)	
Parental Income Missing	0.70	**	0.71	**	0.71	**
	(0.075)		(0.077)		(0.076)	
Respondent Education						
(High School or less)						
Vocational			1.09		1.10	
			(0.093)		(0.094)	
Some College			1.01		1.03	
			(0.053)		(0.055)	
College			0.85	*	0.85	*
			(0.064)		(0.066)	
Post-College			0.87	+	0.90	
			(0.072)		(0.071)	
Respondent Income						
(≤ $20,000)						
$20,000-$39,000			0.92		0.92	
			(0.098)		(0.097)	
$40,000-$74,000			0.86		0.85	+
			(0.082)		(0.081)	
$75,000+			0.77	*	0.76	**
			(0.084)		(0.081)	
Currently Divorced			1.23	**	1.23	**
			(0.073)		(0.073)	
Children in Household					0.97	
					(0.049)	
Currently Enrolled in School					0.88	+
					(0.071)	

Note: Standard Errors in Parentheses

+p≤.10; *p≤.05; **p≤.01