The Impact of Attitudes on Marriage Behavior

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Introduction

Despite a wealth of research on American attitudes towards marriage, cohabitation, and family formation, and how these have changed over the past few decades, little work has examined the effect of attitudes on marriage behavior. This is surprising, as much of the literature on delays in marriage attribute the trend to changing preferences for marriage, particularly on the part of women (Farley 1988; Goldscheider and Waite 1986; Waite and Spitze 1981). It is clear that Americans' attitudes toward marriage have altered in significant ways over the past few decades. Young adults, and even their parents, are more accepting of alternatives to marriage, while growing numbers emphasize the restrictions inherent in married life (Axinn and Thornton 1995; Bumpass, Sweet, and Cherlin 1991; Thornton 1989). Attitudes toward premarital sex and childbearing have also become more permissive, and acceptance of both cohabitation and nonmarriage has increased (Thornton 1989; Trent and South 1992). Nonetheless, the majority of young adults still indicate a desire to marry (Bumpass et al. 1991; Crimmins, Easterlin, and Saito, 1991; Thornton and Freedman 1982; Thornton 1989).

The dramatic changes in the union formation patterns of young adults in the United States are well documented. Over the past few decades, there has been a marked increase in the age at first marriage (Espenshade 1985; Qian and Preston 1993; Rogers and Thornton
so that the average age in the closing decades of the twentieth century has surpassed that of the early twentieth century (Rogers and Thornton 1985; Schoen, Urton, Woodrow, and Baj 1985). In 1988, the average age at first marriage was 25.1 years for females and 27.5 years for males (Schoen and Weinick 1993a). The likelihood of living with a partner has not diminished appreciably, however, due to the increase in cohabiting relationship (Bumpass and Sweet 1989; Bumpass, Sweet, and Cherlin 1991). There are also marked racial differences in marriage timing and prevalence; blacks have lower propensities to marry than whites (Schoen and Weinick 1993b).

Two explanations dominate the theoretical discussion of factors affecting the propensity and timing of marriage. The first asserts that marriage is less central because of the availability of other opportunities, and that the relative preference for marriage has declined (Farley 1988; Goldscheider and Waite 1986; South 1993; Waite and Spitze 1981). This "independence" perspective is applied predominantly to women. Increases in educational attainment, growth in employment opportunities, and rising rates of labor force participation have diminished women's economic reliance on men as providers and marriage as the only sure guarantee from want. Increasingly accepted alternatives to marriage, such as living together or having children without marriage, further diminish the costs of remaining unmarried to both men and women.

The second major explanation for changes in marriage propensities and timing asserts that the observed shifts are the result of changes in men's employment opportunities, rather than a diminishing preference for marriage (Easterlin 1978; Lichter et al. 1992; Oppenheimer 1988, 1994, 1995; Wilson 1987). According to this view, the deterioration of men's economic
position has made it increasingly difficult to attain the level of economic security needed for establishing a marital household. Studies documenting the ailing labor market position of young men throughout the 1970s and the 1980s provide macro-level support of this argument (Levy 1987; Lichter 1988). This argument is also applied to explain the greater declines in black marriage rates (Bennett, Bloom, and Craig 1989; Bulcroft and Bulcroft 1993; Lichter et al. 1992; Wilson 1987).

Testing either of these assertions at the individual level is difficult, in large part because of data limitations. Existing studies often infer that greater job opportunities for women go hand in hand with a growing career orientation and a subsequent decline in the attractiveness of marriage (Goldscheider and Waite 1986; Waite and Spitze 1981). Yet empirical studies do not actually measure individual's work orientation; completed education and/or labor force participation serve as proxies. Similarly, and confoundingly, research examining whether marital delay is due to a deterioration of men's economic prospects generally focus on the same variables; school enrollment, educational attainment, and labor force participation serve as measures of future earning ability. An additional shortcoming of studies directed to examining how men's economic opportunities influence marriage is that relatively few of these studies examine men directly, focusing instead on women (Bennett, Bloom, and Craig 1988; Lichter et al. 1992; Oppenheimer 1995; Waite and Spitze 1991).

This paper tests both of these perspectives, examining how attitudes influence the likelihood and timing of marriage. We look at expressed beliefs about appropriate gender roles and how marriage compares with single life; attitudes towards work; the importance attributed to being financially and professionally established prior to marriage, and of a
similar readiness on the part of potential partners; and how respondents believe economic and emotional dimensions of their life would change if they were married. We can thus examine whether gender and racial differences in attitudes influence marital outcomes, net of standard measures used to control for economic opportunity and family background. We use data from the first two waves of the National Survey of Families and Households (NSFH) to analyze the marriage behavior of never married young adults who were between the ages of 18 and 34 at the time of the initial survey, and ages 23 to 40 at the second interview. We focus in particular on the following two questions: (1) Do attitudes towards marriage influence the likelihood of marriage, net of career orientation and experience? (2) Net of attitudes towards marriage, are women and men with strong career orientations and experiences more likely to marry?

Previous Research

Attitudinal changes that foster what has been termed the "retreat from marriage" have been well documented over the past few decades. Perhaps most important has been the growing acceptance of the viability of living as an unmarried adult. Between 1957 and 1976, attitudes towards persons choosing not to marry grew markedly less negative (Thornton 1989; Veroff, Douvan, and Kulka 1981). Several studies conducted throughout the 1980s document the continuing acceptance of non-marriage, with remaining single increasingly viewed in a positive light (Thornton and Freedman 1982; Thornton 1989).

Despite growing acceptance of alternative union forms, the majority of young adults will eventually marry. Men view marriage in a more positive light than do women, and are more likely to agree that it is better to marry than remain single (Bumpass et al. 1991;
Favorable attitudes towards marriage increase the likelihood of marrying, and speed the transition from singlehood (Axinn and Thornton 1992; Clarkberg, Stolzenberg, and Waite 1995), particularly for early marriage among young women (Axinn and Thornton 1992). We therefore expect those with more traditional gender role orientations and who believe that being married is better than being single to be more likely to realize their preferences than those with neutral attitudes.

As attitudes towards marriage have changed, so too have opinions regarding work and desirable attributes for partners. Earlier research generally assumed the primacy of role complementarity between men and women, with women exchanging domestic expertise for men's market involvement (Becker 1981; Schoen and Wooldredge 1989). In the 1960s, employed women were less likely to marry, particularly if they experienced high occupational achievement (Havens 1973; Mueller and Campbell 1977; Preston and Richards 1975). While Havens (1973) argued that high status women chose not to marry, others suggested that their lower rates of marriage were due to the preference of husbands for "non-threatening" mates, or the selectivity of those entering into either marriage or careers (Spitze 1988). If working women once viewed career and marriage as incompatible, or were seen as less desirable marriage partners, there is ample evidence of a dramatic reversal in these perceptions. Indeed, nowadays men as well as women indicate a preference for partners with economically attractive traits (Bulcroft and Bulcroft 1993; South 1991).

Women's changing labor market position provides many with the means for maintaining independence, and may therefore enable those with weaker preferences for marriage to forego it completely. Testing whether changes in marriage patterns are due to an
increase in competitive alternatives and women's growing economic independence or to a diminishing preference for marriage is difficult, in large part because the indicators are not consistent. While some alternatives reduce the likelihood of marrying, other measures of women's economic independence actually increase women's odds of marrying. For example, studies consistently find that investing in human capital skills, such as schooling, delays both women's and men's marriage likelihood (Thornton et al. 1995; Goldscheider and Waite 1986; Oppenheimer 1995). Overall educational attainment, on the other hand, has a positive effect on the likelihood of marrying, as does labor force participation (Goldscheider and Waite 1986; Lichter et al. 1992; Oppenheimer 1995; Qian and Preston 1993). Rather than resulting in lower marriage rates, fiscal independence actually increases the likelihood of marrying, albeit at older ages (Goldscheider and Waite 1986; Qian and Preston 1993; Waite and Spitze 1981).4

Evidence that shifts in marriage timing for both men and women are primarily due to men's economic status is also far from conclusive. Career-oriented men have long postponed marriage to build their professional profile (Hogan 1978). While the literature has a tendency to look at changes in men's or women's economic situations as mutually exclusive determinants of marriage, the evidence increasingly suggests a convergence in important attributes for marriage. Achieved characteristics once of primary importance to women, such as educational attainment or occupation, are assuming greater importance to men as women's labor force participation becomes increasingly normative; in fact, over the past few decades educational homogamy has increased (Kalmijn 1993; Oppenheimer 1988, 1992). Women's greater economic role can actually diminish the importance of men's economic attributes
Despite wide-spread acceptance of women's employment, marriage appears to be less compatible with women's efforts to build successful careers than it is for men. Recent research has found that young men who attached greater importance to being "successful" in their line of work are more likely to marry than to cohabit, but the reverse was observed for women (Clarkberg, Stolzenberg, and Waite 1995). This may be due to changes in activities that occur upon marriage; for example, domestic activity, particularly the amount of housework done, increases more with marriage for women than for men (Blair and Lichter 1991; Shelton and John 1993). Controlling for current activities such as school enrollment and labor force participation, we expect stronger career orientation to delay marriage for both men and women, as they invest in the skills necessary to ensure them success in the job market. Because women may perceive professional development and marriage as less compatible than remaining single, career orientation should delay marriage to a greater extent for women than for men.

The extent to which racial differences in attitudes influences marriage outcomes has been largely overlooked in studies of union formation. Large racial differences in the propensity to marry are often attributed to blacks' greater acceptance of non-marriage. While black men may be less desirous of marriage, have lower expectations of getting married, and view marriage in a more negative light than do white men (Anderson 1990; Bulcroft and Bulcroft 1993; South 1993; Trent and South 1992), black women are more likely to think they will marry, and perceive greater economic, social, and emotional benefits from marriage than do white women (Bulcroft and Bulcroft 1993). We therefore expect the effect of positive
assessments towards marriage to exert stronger effects for whites than blacks, even after controlling for economic characteristics.

Other Variables

We include control variables for family background, individual attributes and activities, and prior cohabitation experiences. Family background characteristics include family structure at age 16 and mother's educational attainment. Despite some evidence that living in a disrupted family encourages women to marry early as a means of getting away from the parental home (McLanahan and Bumpass 1988), others find childhood family structure to have little impact on either the timing of marriage (Glenn and Kramer 1987; Michael and Tuma 1985; Thornton 1991) or attitudes towards marriage (Amato 1988; Glenn and Kramer 1987; Trent and South 1992). Socioeconomic disadvantage during childhood has, however, been found to reduce blacks' odds of marriage (Manning and Smock 1995). Mother's education is expected to delay marital timing among the youngest respondents only, having no effect past the mid-twenties (Goldscheider and Waite 1991).

Individual controls include age, gender, race, and time-varying covariates for the highest educational level attained, current school enrollment, and current full-time employment. Consonant with existing findings, blacks are expected to be significantly less likely than whites to marry (Bennett, Bloom, and Craig 1989; Kobrin and Waite 1984; Manning and Smock 1995; Schoen and Owens 1992). While current school enrollment should decrease the odds of marrying (Goldscheider and Waite 1986; Thornton, Axinn, and Teachman 1995), respondents with a college degree or higher should exhibit greater likelihoods of marrying that those with a high school degree or less (Qian and Preston 1993;
Schoen and Weinick 1993). Full-time employment of both men and women is also expected to increase the odds of marriage (Goldscheider and Waite 1986; Lichter et al. 1992; Oppenheimer 1994). Because previous research indicates that blacks assign greater importance to economic supports as a prerequisite for marriage than do whites (Bulcroft and Bulcroft 1993; South 1991), full-time employment and educational attainment are expected to exert stronger effects for blacks than whites. Finally, we expect prior cohabitation experience not resulting in marriage to decrease the likelihood of marrying (Schoen and Owens 1992), indicating either a weaker orientation to marriage or difficulty in successfully maintaining relationships.

DATA AND METHODS

The Sample

Our data come from Waves I and II of the National Survey of Families and Households (NSFH), a national probability sample of 13,008 individuals aged 19 and over (Sweet, Bumpass, and Call 1988). Respondents were first interviewed between March 1987 and May 1988, and the same people were contacted again between 1992 and 1994 for a follow-up study. The NSFH includes a range of questions about demographic background, current activities, and childhood family structure; respondents also filled out a self-administered questionnaire that asked about attitudes on a wide variety of topics.

Our study sample consists of never married adults ages 18 to 34 at the time of the first survey. It is thus a nationally representative sample of the unmarried population of the United States at that time. Responses to the second survey provide information on subsequent marriage, cohabitation, school enrollment, and employment. Our study sample contains
1,454 persons: 919 non-Hispanic white men and women, 401 black men and women, and 134 others, including Asians and Hispanics. The NSFH oversampled certain groups, including cohabiting couples, blacks, and Mexican-Americans (cf. Sweet, Bumpass, and Call 1988); weighted frequencies are presented in the descriptive tables.

**Measuring Attitudes**

Attitudes towards marriage and family are measured in several ways. We first examine attitudes towards gender roles and relative preference for marriage over singlehood. Respondents were asked the extent to which they agreed or disagreed with two statements: (a) It is much better for everyone if the man earns the main living and the woman takes care of the home and family (*traditional division of labor*); and (b) It's better for a person to get married than to go through life being single (*marriage is better than being single*). Dummy variables indicate those who strongly agree and agree with each statement, and those who disagree and strongly disagree, relative to the substantial proportion who are neutral (neither agreeing nor disagreeing).

Next we construct three scale variables to capture attitudes towards the economic and emotional benefits of marriage, the importance of various considerations in the decision about when to get married, and orientation to work. A summated-rating scale (*life would be better if married*) is calculated from responses (-2=much worse; 0=same; +2=much better) to four dimensions of life that marriage could alter. Respondents were asked the following question: "Please circle how you think your life might be different if you were MARRIED now."

Answers on the following four dimensions were aggregated: (a) standard of living; (b) economic security; (c) overall happiness; and (d) emotional security. Scores ranged from -8
to +8, with higher scores indicating greater assessed improvement of life with marriage (Cronbach's alpha=.835).\(^7\)

Our second scale measure assesses the importance of various considerations in decisions about when to get married. Respondents were asked to rate on a scale of 1 (not at all important) to 7 (very important) various attributes of partners. Our measure sums responses to having a partner (a) finish all schooling planned; and (b) established in their job (partner's readiness for marriage). The scale for partner's readiness ranges from 2 to 14, with low scores indicating less importance attached to a partner's readiness (Cronbach's alpha = .726).\(^8\)

Our final scale measure utilizes respondents' evaluations of various dimensions of their job (Career Orientation). Respondents were asked the following question: "How would you describe the work you do at your paid job?" Two dimensions of this question are utilized. The first assesses work done on the job as a continuum between interesting and boring, while the second has respondents evaluate the extent to which their work was appreciated; those without a job were assigned a score of zero. Items were reverse coded so that the highest scores indicate the most desirable aspects (7=interested and appreciated). A separate question asked respondents to assess the following statement: "The job I do is one of the most satisfying parts of my life." Those who did not have a job were assigned a score of zero; those who strongly disagreed were assigned a score of 1, those who didn't know or didn't answer received a score of 3 (neither agree nor disagree), and the highest score (5) went to those who strongly agreed. The sum of the scores from these three questions ranged from 0 to 19, with higher numbers demonstrating a strong and positive attitude towards work. Cronbach's alpha is quite high (.865), indicating internal consistency.
Measurement Issues

All of our attitudes are measured at the first interview. While this insures that the attitudes are not influenced by subsequent behaviors such as marriage or employment factors, it also raises several potential difficulties. Family background characteristics are likely to be correlated with attitudes. Omitting background variables from the analysis, however, would produce biased coefficients for the attitude variables. Regressing the independent variables of our analysis on the attitude measures (results not shown) indicates that family structure and mother's educational level are not significant predictors of attitudes towards marriage, career orientation, how life would differ if married, or partner readiness; race, sex, and life cycle are. Family background does influence attitudes towards gender roles. Running our substantive models excluding attitudes towards the traditional division of labor does not change the coefficients on parental characteristics appreciably for either men or women; we therefore conclude that the effects of attitudes are not confounded by the presence of parental attributes.

While attitudes are variable and may change over time, particularly in response to increasing levels of education, job changes, or in anticipation of marriage, other research indicates that young adults' attitudes towards marriage are relatively stable (Axinn and Thornton 1992; Heaton and Call 1995). Attitudes towards traditional gender roles, on the other hand, are more changeable, becoming less traditional over time. While career orientation, assessments of how life would change if married, and opinions regarding partner's readiness may also shift, we unfortunately do not have data to measure the extent of change between surveys. To address the concerns raised both by potential confounding effects of our
explanatory variables on our attitude measures and the changing nature of attitudes, we run models separately by sex. Second, we use discrete-time logistic regression models and introduce time-varying covariates of variables important both in shaping the attitudes we capture at the initial survey and in causing them to change over time. Last, we include a variable for number of months since interview, which reflects the length of time since the attitude was measured.

**Measuring Economic Opportunity**

Independent variables that capture economic opportunity, i.e. school enrollment, educational attainment, and labor force participation, are all measured with time-varying covariates. Retrospective data from the second interview allows us to construct monthly measures of whether school enrollment was full- or part-time and if a degree was obtained; respondents indicating that their attendance was both full- and part-time are coded as being enrolled part-time. Retrospective information on duration and extent of work is utilized to ascertain whether respondents were employed full- or part-time in a given month. Respondents provided detailed information about spells of part- and full-time work, and the transitions between these states, which enable us to capture changes in labor force status. Those completing a degree program had their educational level incremented, for example changing from High School graduate to college graduate.

Other control variables include respondents' socioeconomic background, measured
with family structure at age 16 and mother’s educational level; whether the respondent lives with their biological child (coresident young parent) or has a child with whom they do not live (non-coresident parent); age at first interview; and race; Last, we incorporate a measure of whether the respondent had a prior cohabiting relationship. Variable descriptions, weighted means, and standard deviations for all variables measured at the initial interview are presented in Table 1.

Analytical Approach

Our analysis uses discrete-time event history techniques. We aggregate person-months of risk and estimate the effects of the explanatory variables on the dichotomous dependent variable using logistic regression. Individuals either experience an event (marriage) or are censored at the time of the second interview; the maximum period of risk is 89 months. As the data is measured in month periods, our approach is quite similar to a continuous-time hazard model (Allison 1984; Kalbfleisch and Prentice 1980; Yamaguchi 1991). We present odds ratios (the antilogs of the coefficients), which can be interpreted as the change in the likelihood of marrying associated with each independent variable; an odds ratio greater than 1.0 indicates an increased likelihood of the event occurring relative to the reference group (Morgan and Teachman 1988).

RESULTS

Roughly forty percent of the never married young men and women in our sample married between the time of their first interview and their second survey date. While approximately the same proportion of men and women marry, clear racial differences in the propensity to marry are apparent in Figure 1. Non-Hispanic white men and women are more
than twice as likely to marry as black men and women, while those classified as "other" are intermediate.

Table 2 presents three logistic regression models of the transition to first marriage. Model A examines how race, age, and family background characteristics influence marriage transitions. Model B adds measures of economic activity to the model. Finally, Model C incorporates our attitudinal measures, along with an indicator of past cohabitation experiences. Underlined coefficients in Model C indicate significant gender differences in the effects of an independent variable. The coefficients for our basic family background controls (Model A) do not alter greatly when economic and attitudinal variables are added; we therefore focus our discussion on Model C, comparing differences between Models B and C where appropriate. Controlling for the month since the initial interview has no appreciable effect on the coefficients, beyond the intercept.

As expected, the effect of race is strong and negative, particularly for women, even after controlling for age and family background, economic activity, and attitudes. The odds of black women marrying are only about 30% those of white women, while black men are only 54% as likely as white men to marry. Including attitudinal measures does reduce the racial disparity to a small extent, more so for men than women. Women classified as "other" are also significantly less likely to marry than whites; controlling for attitudes increases this disparity. Our results provide no support for the argument that racial differences in attitudes towards marriage account for lower black marriage rates (Anderson 1990; South 1991, 1993).

Age has the expected effect, with older respondents less likely to marry than their younger counterparts. Among men, the negative influence of age is only apparent in the
oldest age cohort, reflecting their older age at marriage. Whereas some previous literature found premarital childbearing to have a negative influence on the odds of marrying (Bennett, Bloom, and Miller 1995), our results indicate that never married women who live with their biological children are *more* likely to marry. Family socioeconomic background characteristics do not have a significant effect on marriage after controlling for attitudes and previous cohabitation experiences; these results are in line with much previous research (Glenn and Kramer 1987; Michael and Tuma 1985; Thornton 1991).

As in prior studies, full-time school enrollment has a large and negative effect on marriage for both women and men (Goldscheider and Waite 1986; Oppenheimer 1995; Thornton et al. 1995). Part-time enrollment also significantly reduces the likelihood of marrying among men, and in fact decreases the odds of marrying more than full-time enrollment. Labor force activity is more significant for men than women. Men who work full-time are 35% more likely to marry than those not employed or only working part-time; the effect is only weakly significant for women (p < .10). There is no discernable effect of educational attainment, after controlling for attitudes. Our results suggest that despite women's changing roles, economic attributes remain more important in the transition to marriage for men than for women.

Turning to the effect of the attitudes themselves, our results indicate wide variation by sex. The odds of marrying among women who agree that it is better to get married than to go through life being single are 59% greater than for women who neither agree nor disagree with the statement. Even though men are more likely than women to view marriage positively, those who agree that married life is better than being single are no more likely than those who
are neutral to translate their attitudes into behavior. The more men believe that specific economic and emotional aspects of their lives will improve with marriage (*life would be better if married*) the greater their likelihood of making that transition, though the effect is only weakly significant (*p* < .10). Furthermore, the stronger their career orientation the greater the likelihood that men will marry. Whereas a global assessment of marriage benefits may be enough for women, improvements to economic facets of life are apparently greater incentives for men.

Perhaps reflecting their ambivalence towards being "providers," men who do not adhere to traditional gender roles are less likely to marry, though the effect is only weakly significant. Nonetheless, men who reject the traditional division of labor are significantly less likely to marry than women who disagree with traditional gender roles. At the same time, women remain concerned with men's economic readiness for marriage; the more importance women attach to a partner's being established prior to marriage, the less likely they are to marry, and partner's readiness has a significantly greater reducing effect for women than for men. This finding provides support for those arguing that men's poor economic prospects result in delayed marriage.

Lastly, both men and women who previously lived with a partner (but are not currently doing so) are significantly less likely to marry, and the effect is quite large. Women and men who have ever been in a past cohabiting relationship are only 32% and 31% as likely to marry as those who have never resided with a partner. As previous research using retrospective information suggests (cf. Schoen and Owens 1992), these individuals may have a weaker commitment to the institution of marriage. An alternative possibility is that these individuals
altered their attitudes towards marriage as a result of their experience (Thornton 1991), or are negatively selected with regard to their ability to remain in a coresidential union (Lillard, Brien, and Waite 1995). Further research is needed to determine if the meaning of previous cohabitation alters as the prevalence of cohabitation increases.

**Race Interactions**

In order to determine whether race exerts significantly different effects even after controlling for race and attitudes, we interact measures of attitudes and economic activities by sex and race, and present results in Table 3. Models run separately by race did not fit the data well, perhaps due to the small sample size or number of events. Our findings suggest that different economic structures characterize the marriage markets for blacks and whites. For example, school enrollment, one of the prime indicators of future earning potential, substantially increases the odds that black men and women marry, relative to their white counterparts. Post-secondary school still appears to serve as a marriage market where economically attractive black partners can find spouses. However, gainful employment does not have the expected return, at least for men. The odds of marrying among black women who work full-time is almost twice as great (1.9) as for white working women; black men who are employed full-time, on the other hand, are only half as likely to marry as their white male counterparts (.05 < p < .10, for men and women). Women's earning abilities clearly play a greater role for blacks than for whites.

Despite assertions that blacks' attitudes towards marriage differ substantially from whites, we find only one significant race difference. Black women who agree with a traditional division of labor within the home are almost twice as likely as traditional white
women to marry, though the effect is only weakly significant (p=.075). While this finding is somewhat ironic given the greater importance of gainful employment for black women, such conflicts between the attitudes and actions of black women have a long-standing history, based not only on familial need for their wages but on the market constraints facing black men.

Age Interactions

Interacting the independent variables by age reveals important distinctions not only in the effect of current activities on marriage outcomes, but in the impact of attitudes across the life cycle (Table 4). Our age categories follow those used in our main model: 18 to 24, 25 to 29, and 30 to 34 at the initial interview. Interactions involving attitudes are not significant for men, indicating that attitudes hold varying meanings for women at different stages of life.

Among the youngest women, all of the interaction terms that attain significance decrease the likelihood of marrying. As has been found in other research (Goldscheider and Waite 1986; Thornton et al. 1995), the negative influence of full-time school enrollment is limited to those in the prime college-attending years; the odds of marrying for those enrolled full-time are only 19 percent as large as for all women who are not enrolled. Full-time work also significantly decreases young women's odds of marrying. At older ages, school enrollment has a substantial positive effect on women's odds of marrying. Furthermore, young women who agree with a traditional division of labor are only 54 percent as likely to marry as those who are neutral, and even strong career orientation diminishes the odds of marrying at the youngest ages (below the average age of marriage).

Our findings provide support for Oppenheimer's (1988, 1994) view that women are
delaying marriage, rather than deferring it completely. Those who are investing in human
capital accumulation, obtaining schooling and employment experience, are less likely to enter
into an early marriage even if their expressed attitudes indicate their belief in traditional roles
for women. The interaction between partner's readiness and young age, however, is not
significant. At older ages, some of these same characteristics increase women's marriage
odds. For example, the odds of marrying are increased more than threefold for 25 to 29 year
old women who adhere to traditional gender roles at the initial survey. For never-married
women already in their 30s at the first survey, strong career orientations increase the
likelihood of marrying. Also noticeable among the oldest women in our sample is the
reduced likelihood of marrying among older women who disagree that marriage is better than
remaining single. While this may indicate a core of women who never intended to marry, it
is equally probable that these women's attitudes toward marriage are the result of their having
reached their 30s without "tying the knot."

Very few age-interactions are significant for men. Among the youngest men, those
with a college degree or more are over twice as likely to marry. Curiously, men ages 25 to 29
who have a college degree or higher are significantly less likely to marry. That may suggest a
selection effect, but the odds of marrying are considerably elevated among men in this age
group who are enrolled in school part-time, indicating that at older ages educational
supplementation is not incompatible with marriage.

Although age-interactions for attitudes are not significant for all men, running separate
models for white men alone provides further support for a convergence argument regarding
important prerequisites for marriage. The effects of economic variables are largely the same,
but important attitudinal effects appear that provide further support for the marital delay argument for men as well as women. Career orientation is negatively associated with marriage among men in their late 20s, but increases the odds of marrying among men in their 30s (p < .10 for both age groups). Even more noteworthy is that partner's readiness is significant for both groups of men in their 20s, increasing the odds of marrying for men 18 to 24 at time 1, but reducing marriage odds among men 25 to 29. Women's economic attributes have clearly assumed greater importance among white men in their assessment of whether and when to marry.

**SUMMARY AND CONCLUSIONS**

Our study uses newly released data from the second wave of the National Survey of Families and Households to examine directly the extent to which attitudes shape marriage outcomes, net of economic activities. Unlike previous studies of marriage that infer career orientation or changing preferences for marriage from declining marriage propensities (Havens 1973; Goldscheider and Waite 1986; Mueller and Campbell 1977), we include direct measures of career orientation and preferences for marriage in our analysis of first-marriage transitions. Our event-history analysis evaluates the effect of attitudes and how they impact marriage outcomes differently by age, while controlling for standard measures of economic opportunity.

Incorporating attitude measures into standard models of factors influencing marriage timing contributes significantly to the explanatory power of our models. As in previous studies (Axinn and Thornton 1992; Clarkberg, Stolzenberg, and Waite 1995), favorable attitudes towards marriage increase the probability of marrying substantially, though in our
sample this effect is limited to women. Women's rising economic independence and investment in human capital accumulation is clearly a factor in delayed marriage. As in earlier research (Goldscheider and Waite 1986), educational enrollment has a negative effect on marriage rates for both young men and women, but the effect is stronger for women, particularly at the youngest ages. As Valerie Oppenheimer (1988, 1994, 1995) has suggested, the influence of women's economic characteristics are mixed; while such attributes delay marriage among the youngest women, they actually increase marriage odds at older ages. We find clear evidence that women who seek "ready" partners are less likely to marry. Nonetheless, our results also stress the importance of women's economic characteristics as a factor contributing to marital delay. Career-oriented women are not less likely to marry, but they are significantly less likely to do so at an early age, and more likely to marry once in their 30s. Furthermore, among whites, partner's readiness for marriage is significant for men in their twenties, as well as for all women. Gender differences in considerations of importance for marriage are clearly converging; men as well as women seem to consider a partner's economic readiness for marriage important.

Attitudes and timing effects notwithstanding, economic prospects remain more important for men than women. Young men with a Bachelor's degree or higher are more than twice as likely to marry than are men 18-24 who have only a high school degree. Gainful employment, another indicator of men's economic prospects, is positive and significant at all ages. So is career orientation, which assumes particular importance for the older white never married men in our sample. The effect of partner's readiness is also significant for women of all ages, demonstrating a continuing interest in men's economic potential for marriage.
Racial differences in attitudes towards marriage, gender roles, and career orientation do not account for the marriage differential between whites and blacks. In fact, net of background characteristics and controls for current economic activity, factoring in blacks' attitudes slightly increases their likelihood of marrying. For black men and women, changes in marriage patterns appear to have less to do with changing preferences for marriage and more with economic prospects.

Overall, social changes have reduced gender differences, though men's economic resources are still generally of greater importance than women's. At the same time, marriage has receded in prominence and retreated to a later position in the life cycle. Still, for most women as for most men, a career is not a substitute for marriage.
1. Studies using the National Longitudinal Study of Young Women sometimes include a measure of "taste for employment" -- whether young women think they will be working at a paid occupation at age 35 (Goldscheider and Waite 1986; Waite and Spitze 1981). Given changes in women's employment patterns and the growth of two-earner households this may not reflect a "taste," but rather a necessity.

2. Unlike many panel studies, such as the National Longitudinal Study of Young Men and Women or the Detroit Metropolitan Area study, which contain information on young adults only through their early twenties, data from the NSFH allow us to focus on a wider range of ages. This becomes increasingly important as the median age at marriage rises. Additional waves of the NLS will also facilitate studies of marriage timing at older ages.

3. Valerie Oppenheimer has repeatedly pointed out that arguments about women's growing economic independence fail to distinguish between non-marriage and marital delay (1988, 1995).

4. Data limitations preclude most examinations of marriage patterns beyond the late twenties; we cannot tell the extent of non-marriage, then, due to the truncation of our samples.

5. For studies using the Detroit metropolitan area studies, this is because the sample only includes white women (Axinn and Thornton 1992; Thornton 1985; Thornton and Camburn 1987; Thornton, Alwin, and Camburn 1983).

6. We have included the few 18 year olds who were interviewed as the primary respondent.

7. There are nine dimensions to this question, but they measure different components of married life. We therefore focus on two economic and two emotional measures. Models incorporating other dimensions lacked internal consistency and reliability (Cronbach's alpha...
less than .70).

8. We also constructed a measure of considerations important for the respondent (readiness for marriage), summing responses on: (a) having enough money saved; (b) finishing all schooling planned; and (c) being established in a job. Scores ranged from 3 to 21, with low scores indicating that economic supports were not important (Cronbach's alpha = .762). This measure was highly correlated with the partner's readiness measure, and never attained statistical significance; we therefore do not include it in our models.

9. The literature regarding the impact of family background on attitudes towards marriage and gender roles is inconsistent. Looking at a sample of 18 year old whites from the Detroit metropolitan area, Axinn and Thornton (1996) find that mothers' experiences with marital dissolution have important consequences for their children's values regarding family formation; nonetheless, a five-year follow-up of these young adults found that including mothers’ attitudes towards marriage did not significantly effect daughters' likelihood of marrying (Axinn and Thornton 1992). Trent and South (1992), using the first wave of the nationally representative NSFH found no effect of childhood family structure on views regarding the desirability of marriage. Similarly, while Thornton, Alwin, and Camburn (1983) argue that divorced women hold more egalitarian gender-role attitudes than married women, and assert that these attitudes shape those of their children, Kiecolt and Acock (1988) report that adults from intact and non-intact families hold essentially similar views concerning traditional gender role behavior.

10. We examine items as of the initial interview, which include sex, race, age, whether respondent lives with their own child, family status at age 16, mother's educational level,
school enrollment, full-time employment, and educational attainment. Results are available from the authors upon request.

11. Those whose parents divorced and remarried are less likely to agree that the traditional division of labor is best, while respondents who were living in a single-parent family at age 16 are more likely to disagree with such roles.

12. Axinn and Thornton (1992) find that young adults' attitudes towards marriage remained consistent between 1980 and 1985, and that marriage and cohabitation experiences during the interval had little influence on attitudes towards marriage over the period.

13. This is part of a larger research question being examined in greater detail by the investigators.

14. These measures rely on respondent's assessments of the period during which they were enrolled, and are therefore subject to memory errors. In addition, there were a total of 29 respondents who did not have complete information on their school enrollment dates. Rather than discard these cases, they were assumed to have attended for half a semester (2 months). Several cases (n=5) who did not indicate at the first survey that they were enrolled in school but indicated at the second survey that their initial start dates preceded the date of the first interview were also adjusted. A detailed listing of these cases, and the corrections made, is available from the authors.

15. Response error is more prevalent in the labor force participation answers than in those for school enrollment, with greater coding error in measures of whether work was full- or part-time. To include respondents who had data inconsistencies in the coding of employment spells, we assigned respondents to full- or part-time employment. A detailed program listing
the corrections made is available from the authors.

16. While using person-months rather than individuals as the unit of analysis increases the number of cases, the approach does not lead to downward bias in estimated standard errors (Teachman, Tedrow, and Hill (n.d.); Thornton, Axinn, and Teachman 1995).

17. While this figure seems low, our sample includes all never marrieds below age 35. Those who are not married at higher ages are a select group.

18. Thornton et al. (1995) find that full-time school enrollment reduces marriage more than does part-time enrollment. Their study is limited to white men under the age of 24, and examines enrollment for six-month periods. Differences in measurement and inclusivity of sample probably account for our different findings.

19. Previous studies incorporating women's labor force activity have used different measures and obtained varying results. All of the studies using the NLS rely on employment in the previous year, whereas our employment measure is recorded on a monthly basis. Waite and Spitze (1981) find no consistent effect of full-time employment across age groups. Goldscheider and Waite (1986), combining full- and part-time work, find employment to be significant for the total sample of women and men, but not for women between the ages of 21 and 24. Lastly, Oppenheimer (1995) reverses the reference category and finds that women who are not working are significantly less likely to marry than those employed full-time, but there is no significant difference between women working part-time and full-time. In previous models (not presented) we find no significant effect of part-time work on the likelihood of marrying, and therefore drop it from our model.

20. Whereas Goldscheider and Waite (1986) suggest that changes in women's economic roles
could enable men to engage in additional work in the home as a desirable and rewarding activity, this finding does not suggest that young never married men are adopting this behavior.

21. Measures of educational attainment were not statistically significant, however, indicating that blacks with college degrees or some advanced education are no more likely to marry than their white counterparts.

22. Running models for white women only, and interacting by age heightens the effect of this variable, with 30 to 34 year old women who disagree that marriage is better than being single only .17 times as likely to marry as those who express neutral views. The effect of career orientation among white women who are in this age group is the same.

23. The positive effect of attitudes is greater for black men than for black women; the odds of marrying increase by .044 for men after adding our attitude measures, compared to an increase of .018 for black women.
References


Reading List

To Read (updated 8/8/95)

Bennett, N.G., Ann Klimas Blanc, and David E. Bloom. 1988. "Commitment and the modern Union: Assessing the link between premarital cohabitation and subsequent marital stability," ASR 53:127-38. (EH - this is from 1981 data. As cohab has become more normative, patterns have changed).


Schoen, Robert and Robin Weinick. 1993a. *Demog*

Schoen, Robert and Robin Weinick. 1993b. *IMF*


Already Read:


Proportion Marrying Between NSFH 1 and NSFH 2, by Race and Sex

Figure 1.
<table>
<thead>
<tr>
<th>Variables</th>
<th>WOMEN Model</th>
<th>WOMEN Model</th>
<th>WOMEN Model</th>
<th>MEN Model</th>
<th>MEN Model</th>
<th>MEN Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Intercept</td>
<td>-1.811</td>
<td>-1.547</td>
<td>-4.211</td>
<td>-2.476</td>
<td>-2.296</td>
<td>-3.755</td>
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<td>Month since interview</td>
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<td>-0.002</td>
<td>0.000</td>
<td>-0.002</td>
<td>-0.002</td>
<td>-0.001</td>
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<td>Race (Non-H. White Ref)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>-1.244 ***</td>
<td>-1.282 ***</td>
<td>-1.219 ***</td>
<td>-0.780 ***</td>
<td>-0.704 ***</td>
<td>-0.619 ***</td>
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<tr>
<td>Other</td>
<td>-0.651 **</td>
<td>-0.627 **</td>
<td>-0.782 **</td>
<td>-0.423 +</td>
<td>-0.379</td>
<td>-0.319</td>
</tr>
<tr>
<td>Age (18-24 is Ref)</td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>25-29</td>
<td>-0.396 **</td>
<td>-0.459 **</td>
<td>-0.446 **</td>
<td>0.035</td>
<td>-0.099</td>
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<tr>
<td>30-34</td>
<td>-0.670 ***</td>
<td>-0.755 ***</td>
<td>-0.815 ***</td>
<td>-0.400 *</td>
<td>-0.569 **</td>
<td>-0.605</td>
</tr>
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<td>Young Parent (coresident)</td>
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<td>0.190</td>
<td>0.476 **</td>
<td>0.284</td>
<td>0.279</td>
<td>0.331</td>
</tr>
<tr>
<td>Young Parent (non-coresident)</td>
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<td>-0.256</td>
<td>-0.238</td>
<td>-0.134</td>
<td>-0.101</td>
<td>0.177</td>
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<td>Family Structure (Intact=Ref)</td>
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<tr>
<td>Step-Parents</td>
<td>0.016</td>
<td>0.038</td>
<td>0.169</td>
<td>-0.237</td>
<td>-0.185</td>
<td>-0.239</td>
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<tr>
<td>Other Family (Single Mom)</td>
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<td>-0.071</td>
<td>0.075</td>
<td>-0.106</td>
<td>-0.100</td>
<td>-0.062</td>
</tr>
<tr>
<td>Mother's Education (HS Grad)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than HS</td>
<td>-0.287 +</td>
<td>-0.279 +</td>
<td>-0.222</td>
<td>-0.088</td>
<td>-0.038</td>
<td>-0.078</td>
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<tr>
<td>Greater than HS</td>
<td>-0.149</td>
<td>-0.074</td>
<td>0.048</td>
<td>-0.119</td>
<td>-0.186</td>
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<td>Current Activities</td>
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</tr>
<tr>
<td>Enrolled Full-Time</td>
<td>-0.919 **</td>
<td>-1.206 ***</td>
<td>-0.530 +</td>
<td>-0.626</td>
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<tr>
<td>Enrolled Part-Time</td>
<td>-0.258</td>
<td>-0.293</td>
<td>-0.688 *</td>
<td>0.745</td>
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<tr>
<td>Work Full-Time</td>
<td>0.161</td>
<td>0.267 +</td>
<td>0.317 *</td>
<td>0.302</td>
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<td>Respondent's Ed Level</td>
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<td></td>
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<tr>
<td>Less than HS</td>
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<td>-0.318</td>
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<td>Some College</td>
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<td>0.089</td>
<td>-0.028</td>
<td>0.104</td>
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<tr>
<td>BA or More</td>
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<td>0.062</td>
<td>0.376 *</td>
<td>0.257</td>
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</table>
## Table 4. Odds Ratios for Age Interactions from Regression of Transition to First Marriage

<table>
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<tr>
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<th>MEN</th>
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<th></th>
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<tbody>
<tr>
<td></td>
<td>18-24</td>
<td>25-29</td>
<td>30-34</td>
<td>18-24</td>
<td>25-29</td>
<td>30-34</td>
</tr>
<tr>
<td>Economic Attributes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrolled Full-Time</td>
<td>0.185</td>
<td>--</td>
<td>7.968</td>
<td>--</td>
<td>0.057</td>
<td>9.947</td>
</tr>
<tr>
<td>Enrolled Part-Time</td>
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<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Work Full-Time</td>
<td>0.539</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>4.140</td>
<td>--</td>
</tr>
<tr>
<td>BA or More</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>2.106</td>
<td>0.476</td>
<td>--</td>
</tr>
<tr>
<td>Attitudes * Age</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agree w/ Traditional Division</td>
<td>0.54</td>
<td>3.024</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Disagree w/ Marriage Better</td>
<td>--</td>
<td>--</td>
<td>0.260</td>
<td>--</td>
<td>--</td>
<td>--</td>
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<tr>
<td>Career Orientation</td>
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<td>1.071</td>
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* All coefficients presented are significant at the .05 level.

Includes all variables from Table 2, Model C.

## Table 3. Odds Ratios for Race Interactions from Regression of Transition to First Marriage

<table>
<thead>
<tr>
<th>Economic Attributes</th>
<th>Race (Black = 1)</th>
<th>WOMEN</th>
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<th>MEN</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18-24</td>
<td>25-29</td>
<td>30-34</td>
<td>18-24</td>
<td>25-29</td>
</tr>
<tr>
<td>Enrolled Full-Time</td>
<td>4.438</td>
<td>5.217</td>
<td></td>
<td>(p = .043)</td>
<td>(p = .012)</td>
</tr>
<tr>
<td>Enrolled Part-Time</td>
<td>--</td>
<td>--</td>
<td></td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Work Full-Time</td>
<td>1.895</td>
<td>0.498</td>
<td></td>
<td>(p = .064)</td>
<td>(p = .090)</td>
</tr>
</tbody>
</table>

Includes all variables from Table 2, Model C.

## Table 5. Odds Ratios for Age and Race Interactions

<table>
<thead>
<tr>
<th>Economic Attributes</th>
<th>RACE</th>
<th>WOMEN</th>
<th></th>
<th>BLACK</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>18-24</td>
<td>25-29</td>
<td>30-34</td>
<td>18-24</td>
<td>25-29</td>
</tr>
<tr>
<td>Economic Attributes</td>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrolled Full-Time</td>
<td>-- 0.058</td>
<td>9.947</td>
<td>+</td>
<td>--</td>
<td>0.058</td>
</tr>
<tr>
<td>Enrolled Part-Time</td>
<td>-- 0.056</td>
<td>9.947</td>
<td>+</td>
<td>--</td>
<td>0.056</td>
</tr>
<tr>
<td>Work Full-Time</td>
<td>-- 0.054</td>
<td>9.947</td>
<td>+</td>
<td>--</td>
<td>0.054</td>
</tr>
<tr>
<td>Attitudes * Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agree w/ Traditional Division</td>
<td>0.425</td>
<td>3.069</td>
<td>--</td>
<td>--</td>
<td>12.333</td>
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<tr>
<td>Disagree w/ Marriage Better</td>
<td>--</td>
<td>--</td>
<td>0.166</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Career Orientation</td>
<td>-- 1.074</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1.074</td>
</tr>
<tr>
<td>Life would be Better if married</td>
<td>1.115</td>
<td>0.864</td>
<td>--</td>
<td>--</td>
<td>1.115</td>
</tr>
</tbody>
</table>

Includes all variables from Table 2, Model C.