Early Marriage in the United States

Despite drastic changes in the American family, a significant minority of Americans marry early. Using data from the National Longitudinal Study of Adolescent Health (N = 14,165), this study evaluates the prevalence and antecedents of early marriage in the United States. The results indicate 25% of women and 16% of men marry before age 23, and early marriage varies widely across a number of characteristics. Individuals who marry earlier are more likely to be from disadvantaged families, from conservative Protestant or Mormon families, to value their religious faith more highly, to have a highschool diploma but a lower educational trajectory, and to cohabit before marriage. Scholars and policymakers interested in marriage should pay adequate attention to understanding and supporting these individuals' marriages.

Changes in marriage, cohabitation, divorce, remarriage, and nonmarital fertility over the past 60 years have fueled debates among policymakers, scholars, and laypeople alike about the future of the family. In addition to documenting these shifts and their effect on the well-being of children and adults, family scholars are thinking more critically about the causes that underlie these changes (Seltzer et al., 2005). Among the more notable changes is an evident shift in the union formation patterns of young adults, marked by a delay in the age at first marriage and an increase in cohabitation. According to the U.S.

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Census Bureau, the median age at first marriage has climbed to 26.7 years for men and 25.1 years for women (Johnson & Dye, 2005), increases of 4 and 5 years, respectively, since 1960. The number of cohabiting households has experienced a similarly rapid and substantial increase, rising from 440,000 in 1960 to 4.9 million in 1998 (Casper & Bianchi, 2002). As a result, family researchers have largely abandoned the sociological study of early marriage and chosen to focus on explanations for why people are not marrying in early adulthood. Yet a nontrivial proportion of young people continue to marry at young ages: 19% of 20 - 24 year olds including 13% of men and 25% of women have married (U.S. Census Bureau, 2006). Those who marry young face significant hurdles, including impediments to their educational attainment (Alexander & Reilly, 1981; Smith & Hooker, 1989) and the long-term success of their marriage (Booth & Edwards, 1985; Teachman, 1983). Thus, it is important to focus not only on why people are avoiding marriage during young adulthood but also on why a significant minority of young adults continue to marry early at a time when cohabitation and premarital sex are increasingly normative and socially acceptable.

Given that many predictors of early marriage have not been static across this recent period of significant family change (South, 2001; Wolfinger, 2003), previously identified correlates and causes of early marriage may not predict marriage among contemporary young adults. In addition to changes in the American family, the processes leading to early marriage may also have been altered by a cultural shift towards "individuation." That is, individuals today are less susceptible to the influence of demographic and family influences than they once were and more prone

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to individualized influences (Bumpass, 1990; Lesthaeghe & Surkyn, 1988; South). Using a sample of contemporary young adults from the National Longitudinal Study of Adolescent Health (Add Health), this study examines the characteristics of young adults who marry early in an effort to expand and update research on marriage during the transition to adulthood. Before turning to the present study, however, we first review what previous research has revealed about early marriage.

BACKGROUND

Research has shown marital timing is affected by an individual's demographic and family background. With respect to demographic variations, women marry younger than men (Goldscheider & Waite, 1986; Johnson & Dye, 2005). Race-ethnic differences in marital timing are also pronounced. Hispanics are the most likely to marry young, followed somewhat closely by Whites and more distantly by Asians and Blacks (Glick, Ruf, White, & Goldscheider, 2006; Michael & Tuma, 1985; Teachman, Tedrow, & Crowder, 2000). Moreover, geographic location has also been found to be associated with early marriage. Individuals who live in the southern United States are more likely to marry at young ages, as are people living in nonmetropolitan areas (Bramlett & Mosher, 2002: Goldscheider & Waite; McLaughlin, Lichter, & Johnson, 1993). These young people, especially women, may be less likely to receive economic support from their parents, to perceive viable options outside of marriage, or to perceive an undesirable marriage market (McLaughlin et al.).

The resources provided by an individual's family of origin appear to be extremely salient for a young person's decision to marry. People whose parents have higher educational attainment and financial assets are less likely to marry young (Axinn & Thornton, 1992), possibly because (a) families with more abundant economic resources can provide alternative living situations for their older children, especially daughters (Waite & Spitze, 1981); (b) individuals are in less of a hurry to leave these types of homes (Thornton, 1991); (c) individuals from these homes desire a higher standard of living (South, 2001); or (d) these young people are more likely to attend college themselves.

Although socioeconomic resources are an important way families of origin influence mari-

tal timing, they are not the only way. Some evidence suggests that family structure plays an important part in marital timing, though the evidence has hardly been conclusive. A number of studies suggest single parenting has little effect on early marriage (Aquilino, 1991; Goldscheider & Goldscheider, 1998; Lloyd & South, 1996; Michael & Tuma, 1985), yet others find children from single-parent families are less likely to marry young (Glick et al., 2006; Goldscheider & Goldscheider, 1993). At the same time, individuals from stepfamilies appear more likely to marry early (Glick et al.; Goldscheider & Goldscheider, 1993; Michael & Tuma). The weakening influence of family structure over time may explain some of these disparate findings (Wolfinger, 2003).

In addition to family structure, the marital timing of parents may be an important factor that predicts marital timing among young people: Children of mothers who married young are more likely both to marry and to cohabit at earlier ages (Thornton, 1991). Marital timing also varies widely by religious traditions. On one end of the spectrum are Catholics, Jews, and the religiously unaffiliated, who are prone to delay marriage. Mainline Protestants fall somewhere in the middle of the spectrum, whereas conservative Protestants and Mormons are the most likely to marry young (Lehrer, 2004; Xu, Hudspeth, & Bartkowski, 2005). These patterns are generally reflective of the degree of emphasis placed on familism in these traditions (Xu et al.). (Although the official teachings of the Catholic Church are quite pro-family, Xu et al. argue that American Catholicism has downplayed the importance of marriage since the 1960s.)

Marrying young may also be subject to personal characteristics that are independent (at least in part) of demographic and family characteristics. The role of religiosity (i.e., the strength of religious commitment) in early marriage is not entirely clear. Earlier research suggested that religiosity hastened marriage (Thornton, Axinn, & Hill, 1992), but evidence from the 1995 National Survey of Family Growth indicates that increased religious service attendance has no effect on marital timing (Lehrer, 2004). Church attendance, however, is only one aspect of religiosity. Religious salience, or an individual's self-reported importance of religion, may signal a person's internal commitment to the religion and its teachings. One reason religion may spur marriage is that religious traditions nearly universally proscribe premarital sex. Indeed, young people who sign a pledge to remain abstinent from sex until marriage — an idea with Southern Baptist origins — move more quickly into marriage (Brückner & Bearman, 2005).

Young people's educational characteristics may also be important predictors of marriage in early adulthood, especially among women. Women with higher test scores and higher levels of educational engagement (i.e., being prepared for class), as well as those who graduate from high school, are less likely to marry early. The findings for men are more muted, but men's school engagement is also associated with lower rates of early marriage (Glick et al., 2006). On the other hand, young adults who do not complete high school may not view marriage as a viable option (Edin & Kefalas, 2005; Smock, Manning, & Porter, 2005).

Perhaps the biggest societal change that may influence early marriage is cohabitation. Nearly 60% of all women cohabit before reaching age 24, compared to just 33% who marry by age 24 (Schoen, Landale, & Daniels, 2007). Much of the recent postponement of marriage has been attributed to the increase in cohabitation rates among young adults (Bumpass, Sweet, & Cherlin, 1991; Raley, 2000). Raley (p. 20) asserts that "cohabitation in some ways substitutes for previously earlier ages at marriage." Cohabitation, then, might be considered a viable pathway out of singlehood for young adults. Young people who cohabit during young adulthood may delay or opt out of marriage.

As ought to be evident by now, many of the studies reviewed here are either dated themselves or make use of dated samples. Most of the studies are of people who transitioned to adulthood in the 1960s, 1970s, or 1980s, with only a few exceptions. Glick et al.'s (2006) study uses data from young adults of the early 1990s. Teachman et al.'s (2000) overview of family change includes data up to 1998. These studies pay particular attention to race and ethnic differences in early marriage, though Glick et al. also examine family structure and educational characteristics. Both South (2001) and Wolfinger (2003) also include data from the early 1990s in their studies, yet both of these studies reveal weakening effects of family background on early marriage that may have continued beyond that point in time. Studies using the 1995 National Survey of Family Growth (Lehrer, 2004; Raley, 2000) examine early marriage among women in the context of cohabitation, but Schoen et al.'s (2007) analysis of 2001 - 2002 Add Health data reveals significant increases in cohabitation since 1995. Indeed, the only studies using data from the 21st century (Bramlett & Mosher, 2002; Brückner & Bearman, 2005; Johnson & Dye, 2005; Schoen et al.) do not offer an in-depth look at early marriage. Given the continued increase in cohabitation cited by Schoen et al., it is important to update and expand our knowledge of early marriage in the contemporary United States.

In light of the findings summarized above, we formulate the following set of hypotheses:

- The gender and race hypothesis: Women will be more likely than men to marry early; Whites and Hispanics will be more likely than Blacks and Asians to marry early.
- The geography hypothesis: Young adults who live in the South and in rural areas will be more likely than their counterparts to marry early.
- The family socioeconomic status hypothesis:
 Young adults with more educated parents and
 from families with higher incomes will be
 less likely to marry early.
- The parent marital characteristics hypothesis: Young adults from single-parent families will be less likely to marry early than those whose biological parents are married, whereas those from stepfamilies and other family structures will be more likely to marry early than those whose biological parents are married. Young adults whose parents married earlier will be more likely to marry early than young adults whose parents married later or not at all.
- The religious affiliation hypothesis: Young adults who affiliate with conservative Protestantism and Mormonism will be more likely than mainline Protestants to marry early, whereas Black Protestants, Catholics, Jews, and the nonreligious will be less likely to marry early.
- The religious behaviors and attitudes hypothesis: Young adults who attend religious services more frequently, value religion more highly, and have taken an abstinence pledge will be more likely to marry early.
- The education hypothesis: Young adults who have earned a high school diploma will be more likely to marry early, but those with a higher GPA and college aspirations will be less likely to marry early.

• The cohabitation hypothesis: Young adults who have formed a cohabiting union will be less likely to marry early than those who have not.

Recent societal changes in America may lead to the rejection of some of these hypotheses. We also expect, per the individuation hypothesis mentioned above, that personal characteristics will play a play a more prominent role in early marriage than demographic and family characteristics.

METHOD

Data and Sample

The data for this study come from Waves 1 and 3 of Add Health. Add Health was funded by the National Institute of Child Health and Human Development (NICHD) and 17 other federal agencies. It is a school-based panel study of health-related behaviors and their causes, with emphasis placed on social context and social networks. Wave 1 was conducted in 1994 and 1995 and consisted of in-depth interviews with 20,745 American youth in grades 7 – 12. Schools included in the study were chosen from a sampling frame of U.S. high schools and were nationally representative with respect to size, urbanicity, ethnicity, type (e.g., public, private, religious), and region. A total of 132 schools participated in the study, ranging in size from 100 to over 3,000 students. Wave 3 was conducted in 2001 and 2002, when respondents were 18 – 27 years old, and consisted of interviews with 15,197 of the Wave 1 respondents.

We dropped the cases for the 875 respondents (6% of the full sample) who lacked a valid sample weight, the 32 respondents who lacked valid data for their marital history (0.2% of the full sample), and the 125 respondents who were older than 25 at Wave 3 (0.8% of the full sample), leaving a final analytic sample of 14,165 (93% of the full sample). Missing values for all other variables were imputed using indicator/dummy variable adjustment (Cohen, Cohen, West, & Aiken, 2003). Table 1 shows descriptive statistics for all variables used in the analyses.

Dependent Variable

The dependent variable for this study is a binary measure of whether or not the respondent married in a given person-year (or, for the table of bivariate

Table 1. Mean, Range, and Standard Deviation of Measures (N = 14,165)

Variables	Mean	Range	SD
Married (Wave 3)	.18	0,1	.39
Age (Wave 3)	21.77	18 - 25	1.81
Female	.49	0,1	.50
White	.68	0,1	.47
African American	.16	0,1	.36
Hispanic	.10	0,1	.31
Asian	.04	0,1	.19
Race or ethnicity missing	.01	0,1	.12
Lives in the south	.39	0,1	.49
Lives in urban area	.26	0,1	.44
Lives in suburban area	.58	0,1	.49
Lives in rural area	.16	0,1	.36
At least one parent has college degree	.27	0,1	.45
Parent education missing	.14	0,1	.35
Family income	4.95	1 - 11	2.42
Family income missing	.22	0,1	.41
Biological parents married	.56	0,1	.50
Single parent family	.22	0,1	.41
Stepfamily	.13	0,1	.34
Other family structure	.09	0,1	.39
Parent married at age 18 or younger	.25	0,1	.43
Parent married at age 19 or 20	.21	0,1	.41
Parent married at age 21 or 22	.17	0,1	.38
Parent married at age 23, 24, or 25	.12	0,1	.32
Parent married at age 26 or older	.08	0,1	.28
Parent never married	.04	0,1	.20
Parent age at marriage missing	.12	0,1	.33
Conservative Protestant	.19	0,1	.39
Black Protestant	.12	0,1	.32
Mainline Protestant	.21	0,1	.40
Catholic	.24	0,1	.43
Mormon	.01	0,1	.10
Jewish	.01	0,1	.09
Other religion	.09	0,1	.28
No religion	.12	0,1	.33
Religious affiliation missing	.02	0,1	.14
Religious service attendance	2.73	1 – 4	1.19
Religious service attendance missing	.02	0,1	.15
Importance of religion	3.03	1 – 4	1.04
1 0			
Importance of religion missing	.02	0,1	.15
Has taken an abstinence pledge	.13	0,1	.33
Abstinence pledge missing	.01	0,1	.11
Earned high school diploma (Wave 3)	.81	0,1	.39
High school diploma information	.00	0,1	.04
missing (Wave 3) Cumulative high school GPA (Wave 3)	2.57	0-4	.76

Table 1. Continued

Variables	Mean	Range	SD
Cumulative high school GPA missing (Wave 3)	.20	0,1	.40
Wants to attend college	4.42	1 - 5	1.04
Wants to attend college missing	.01	0,1	.08
Ever cohabited (Wave 3)	.40	0,1	.49
Ever cohabited missing (Wave 3)	.00	0,1	.05

 $\it Note$: Unless otherwise noted, all variables are Wave 1 measures.

statistics, whether or not the respondent married before age 23). Respondents reported the month and year of their first marriage. This information was compared to their date of birth to determine if the respondent married in a particular person-year. Those who married in that person-year were coded 1 and censored beyond that point; those who had not married were coded 0. Respondents who married younger than $18 \ (n = 129)$ are grouped with those who married at age 18.

Independent Variables

Past research has identified several characteristics that are predictive of marital timing. We separate these characteristics into two different groups: (a) demographic and family characteristics and (b) personal characteristics. Except where indicated below, all independent variables are taken from the Wave 1 survey.

Demographic and family characteristics. Because marital timing has varied widely by demographic characteristics, we include indicators of gender and race (White, Black, Hispanic, and Asian). The urbanicity of the respondent is measured by variables for living in an urban area, suburban area, or rural area (created from the school administrator's report of the type of school the respondent attended). We also include a dummy variable for whether the respondent lived in the South. To gauge the socioeconomic status of the respondents' family of origin, an ordinal measure of family income and a binary variable for parents' education are included. We also measure the intergenerational transmission of marital timing by tapping the respondents' parent's (usually the mom's) age at marriage and family structure. The family structure variable is based on the respondent's family structure at age 14 (or at the time of the Wave 1 survey if the respondent was younger than

14), and we differentiate among respondents living in families with two biological parents, those living with a single biological parent (and no one else), those living in a stepfamily (one biological parent and his or her spouse), and those in another type of family. Lastly, following the RELTRAD method outlined in Steensland et al. (2000), we assign a religious affiliation variable to each respondent. Respondents fall in one of eight categories: conservative Protestant, mainline Protestant, Black Protestant, Catholic, Mormon, Jewish, other religion, or no religion. As Steensland et al. explain, conservative (or evangelical), mainline, and Black Protestant groups each have a distinct religious history, theology, and culture that may lead to different social attitudes and behaviors among adherents.

Personal characteristics. An individual's decision to marry may also be affected by personal characteristics. We include two measures of the respondent's religiosity. The first measure, frequency of religious service attendance, taps an individual's involvement in a moral community and his or her level of public religiosity. This measure ranges from *never* (coded 1) to *once a week* or more (coded 4). The second measure of religiosity, self-reported importance of religion in the respondent's life, captures a more private, subjective aspect of religiosity. This measure ranges from not important at all (coded 1) to very important (coded 4). Unfortunately, respondents who indicated on the first religion section question (about affiliation) that they had "no religion" were subsequently skipped out of all religion questions. Add Health analysts have typically assigned the lowest values of attendance and salience to these respondents to avoid losing approximately 2,000 nonrandom cases; we do the same. We also incorporate a dummy variable for respondents who had taken a formal pledge to remain abstinent until marriage.

We further consider educational attainment, achievement, and aspirations. The measure of educational attainment is a dummy variable for respondents who earned their high school diploma by the Wave 3 survey (this measure is time varying, based on the date of high school completion, in the event-history analysis). Subsequent educational attainment is not measured, as it may have occurred after the respondent married. To measure educational achievement, Add Health collected transcripts from the last high school attended by the Wave 3 respondents. From

 $Table\ 2.\ \textit{Percent of Young Adults Married Before Age 23, Split\ by\ Gender, 23-25-Year-Olds}$

	Women ($n = 2,975$)	Men $(n = 2,900)$
Overall ^a	25.3	15.6
Demographic and family characteristics		
Race or ethnicity		
White	$29.4_{\rm a}$	16.1 _a
Black	$10.6_{\rm b}$	9.3 _b
Hispanic	$27.5_{a,c}$	24.3_{c}
Asian	16.4 _{b,c}	$12.3_{a,b}$
Region		
Lives in the south	31.5 _a	21.4 _a
Lives outside the south	$21.6_{\rm b}$	11.7 _b
Urbanicity		
Lives in urban area	$24.0_{a,b}$	17.3 _a
Lives in suburban area	22.4 _b	13.1 _a
Lives in rural area	37.3 _a	21.1 _a
Parents' educational attainment	u.	u u
At least one parent has college degree	15.9 _a	9.5 _a
No parent has college degree	28.7 _b	18.7 _b
Family income	U	b
Family income below \$30,000	27.3 _a	19.3 _a
Family income above \$30,000	24.8 _a	13.7 _a
Structure of family of origin		- · · · u
Biological parents married	23.5 _a	15.8 _a
Single parent family	22.9 _a	10.6 _b
Stepfamily	$26.0_{\rm a}$	21.3 _a
Other family structure	35.8 _b	18.1 _a
Parent's age at marriage		a a
Parent married at age 18 or younger	36.1 _a	22.3 _a
Parent married at age 19 or 20	27.4 _b	17.3 _a
Parent married at age 21 or 22	19.9 _c	11.1 _b
Parent married at age 23 or older or never married	15.1 _c	10.6 _b
Religious affiliation		
Conservative Protestant	42.8 _a	24.2 _a
Black Protestant	11.4 _b	8.8 _b
Mainline Protestant	28.3 _c	15.3 _{c,d}
Catholic	16.6 _d	12.0 _{b,c}
Mormon	39.2 _{a,c,d}	29.8 _{a,c,d}
Jewish	<1.0 _e	<1.0 _e
Other religion	33.1 _{a,c}	20.6 _{a,d}
No religion	25.1 _c	15.0 _{c,d}
Personal characteristics		c,a
Religious service attendance		
Attends religious services once a week or more	25.7 _a	17.9 _a
Attends religious service less than weekly	25.6 _a	15.0 _a
Importance of religion	a	a a a a a a a a a a a a a a a a a a a
Religion is very important	25.3 _a	18.2 _a
Religion is less than very important	25.9 _a	14.7 _a
Abstinence pledge status	a	- · · · · a
Has taken an abstinence pledge	$29.2_{\rm a}$	$17.0_{\rm a}$
Has not taken an abstinence pledge	24.2 _a	15.2 _a

Table 2. Continued

	Women ($n = 2,975$)	Men $(n = 2,900)$
Educational attainment		
Earned high school diploma	24.6_{a}	15.4 _a
Did not receive high school diploma	29.9 _a	16.4 _a
Educational achievement		
Cumulative high school GPA of 3.0 or higher	21.8_{a}	13.6 _a
Cumulative high school GPA below 3.0	25.8_{a}	17.1 _a
Educational aspirations		
Wants to attend college very much ^b	22.9 _a	13.3 _a
Wants to attend college less than very much	$32.0_{\rm b}$	19.4 _b
Cohabitation history		
Ever cohabited	25.7 _a	15.1 _a
Never cohabited	25.1 _a	16.1 _a

Note: Percentages under the same heading (e.g., Race or ethnicity) that do not share subscripts differ at p < .05 according to Wald tests with Bonferroni adjustments. All values are weighted. N varies by variable in question because of missing values.

this information, we calculated a cumulative high school GPA. Add Health also asked their respondents (at Wave 1) to indicate how much they wanted to attend college, on a scale of 1 to 5. This variable serves as our measure of educational aspiration.

Finally, we include a measure of the respondent's cohabitation history taken from the Wave 3 survey. Add Health asked each respondent, "Have you ever lived with someone in a marriage-like relationship for one month or more?" Respondents who had ever cohabited, either with their future spouse or with someone else, were coded 1 for this variable; all others were coded 0. For the event-history analysis, we created a time-varying cohabitation variable.

Analytic Approach

We begin by presenting the percentage of 23 – 25-year-old women and men who married before age 23 in Add Health Wave 3 by a number of demographic, family, and personal characteristics (Table 3). This provides a basic and straightforward overview of the prevalence of young marriage and its correlates. We use age 23 as the cutoff for early marriage because of the large number of marriages that occur in the year after college graduation (typically around age 22). We suspect that, for many middle-class young adults, marriage following college graduation is

still considered normative and "on-time," though it is becoming statistically "early." Thus, all the marriages considered in this first part of our analysis are both statistically and normatively early. We present these simple statistics separately for women and men because of the consistent finding that women marry earlier than men (Goldscheider & Waite, 1986; Johnson & Dye, 2005). Although the prevalence of early marriage differs significantly by gender, Table 2 suggests and preliminary analyses confirmed that the factors associated with young marriage do not differ by gender (with the exception of race, which we discuss below). Thus, in Table 3, which uses discrete-time proportional hazards models to predict the timing of first marriage among the full sample, we present results from a model that includes both women and men.

To perform the analysis in Table 3, a person-year file was created containing multiple observations for each respondent, one for each year the respondent lived beyond his or her 18th birthday (an 18-year-old contributes one person-year, a 19-year-old contributes two person-years, etc.). The data are censored after first marriage, if applicable. We model the hazard as fully non-parametric, using a dummy variable for each year at risk from ages 19 – 25 (age 18 is the reference category). To account for the complex sampling design of the Add Health data, we generate all analyses using *svy* estimators in Stata, which

^aOverall marriage rates for women and men are significantly different at p < .05. ^bReported a 5 — on a scale of 1 to 5 — when asked how much they wanted to attend college.

account for the primary sampling unit (high school), the region, and the unequal probability of being included in the sample.

RESULTS

Table 2 reports the percentage of women and men who are married before age 23 by a variety of characteristics. Table 2 reveals that early marriage did indeed decline in the last several decades, but it remained far from rare. Over 25% of women married prior to age 23, as did more than 15% of young men. Marriage in early adulthood is clearly patterned by race. Only 11% of African American women married before age 23. White and Hispanic women had the highest rates of marriage before 23 at nearly 30% each, though Hispanic women were not significantly more likely to marry by this point than Asian women. Among men, Blacks were also the least likely to marry prior to 23. Just 9% had married before this age, compared to 12% of Asian men and 16% of White men. Hispanic men were the most likely to marry early: Nearly one quarter were married before age 23.

Other demographic and family characteristics also played an important role in the marital timing of young adults. As our geography hypothesis predicted, early marriage was more common for those who grew up in the South and in rural areas. More than 30% of all women who lived in the South during adolescence married before their 23rd birthday, as did about 37% of those living in rural areas. Young men from the South also had higher rates of early marriage, though rural men were not statistically more or less likely to marry early than their counterparts. Parental socioeconomic status was also an important factor for marrying young in the United States. Only about 16% of young women with a collegeeducated parent and just about 10% of young men married prior to age 23, compared to 29% and 19% of young women and men, respectively, with no college-educated parent. Rates of early marriage did not differ, however, by family income level.

Parents appear to have transmitted marriage norms intergenerationally. Young women who grew up in a home with an "other" family structure (including those living with a biological parent and that parent's cohabiting partner, as well as those living with no biological parent) and young men from single-parent families avoided early marriage most often. Moreover, parents' marital

timing was also a significant predictor of young marriage: For both women and men, those whose parent married before age 21 were more likely than their counterparts to be married themselves prior to age 23.

Marriage in early adulthood varied widely by religious affiliation. More than 42% of women who grew up as conservative Protestants married prior to age 23. These women were more likely to marry early than Black Protestant, mainline Protestant, Catholic, Jewish, and religiously unaffiliated women. Mormon women also had a marriage rate near 40%, but courtesy of their small representation in the sample, they differed significantly from Black Protestant and Jewish women. Jewish, Black Protestant, and Catholic women, on the other hand, were among the least likely women to marry before age 23. Under 1% of Jewish women, just 11% of women from the Black Protestant tradition, and only 17% of Catholic women married early. Mainline Protestant women, unaffiliated women, and women from "other" religious traditions occupied a sort of middle ground with respect to marriage rates prior to age 23. The pattern of men's early marriage rates by their religious tradition during adolescence was similar to that for women, though there were fewer statistical differences among these groups. Nevertheless, conservative Protestants and Mormons were the most likely to marry before age 23; religiously unaffiliated men, mainline Protestant men, and men from "other" religious traditions fell in the middle of the spectrum; and Catholic, Black Protestant, and Jewish men had the lowest early marriage rates.

Thus far, we have found significant variations in the prevalence of early marriage by demographic and family characteristics. The same cannot be said, however, for variations by personal characteristics. Indeed, the only significant difference in marriage rates by personal characteristics was among those with differing educational aspirations. Both women and men who wanted very much to attend college reported a lower prevalence of marriage prior to age 23 than their counterparts. Interestingly, religious service attendance and religious salience during adolescence, abstinence pledging, high school completion, high school GPA, and even cohabitation history were not associated with marriage before age 23 among women or men.

Table 3 presents coefficients and odds ratios from a logistic regression model predicting the timing of first marriage. This event-history technique

Table 3. Coefficients and Odds Ratios From Logistic Regression Analysis Predicting Timing of First Marriage

	β	SE	e^{β}
Demographic and family characteristic	s		
Age 19	23**	.08	.79
Age 20	15	.12	.86
Age 21	.03	.12	1.04
Age 22	.16	.12	1.17
Age 23	.54***	.11	1.72
Age 24	.02	.16	1.02
Age 25	82	.47	.44
Female	.56***	.09	1.74
Black	60**	.18	.55
Hispanic	.18	.11	1.20
Asian	26	.24	.77
Lives in the south	.46***	.10	1.58
Lives in urban area	02	.12	.98
Lives in rural area	.34**	.10	1.40
At least one parent has	41***	.08	.67
college degree			
Family income	04**	.02	.96
Single-parent family	12	.07	.89
Stepfamily	.17	.09	1.19
Other family structure	.10	.08	1.10
Parent married at age 18 or younger	.57***	.14	1.77
Parent married at age 19 or 20	.45**	.15	1.56
Parent married at age 21 or 22	.29*	.14	1.34
Parent married at age 23, 24, or 25	.13	.16	1.14
Parent never married	.06	.19	1.06
Conservative Protestant	.27*	.11	1.31
Black Protestant	35	.18	.71
Catholic	33***	.07	.72
Mormon	.96***	.18	2.61
Jewish	68	.58	.51
Other religion	.27*	.12	1.31
No religion	.17	.15	1.19
Personal characteristics	,		1117
Religious service attendance	.05	.03	1.05
Importance of religion	.13*	.05	1.13
Has taken an abstinence pledge	.13	.08	1.13
Earned high school diploma	.28**	.08	1.32
(time varying)	.20	.00	1.52
Cumulative high school GPA	12*	.05	.92
Wants to attend college	12* 08*	.03	.92
Cohabited (time-varying)	.83*	.09	2.30
Constant	-4.03***	.31	2.30
	0,451.32	.51	_
Note: Reference categories are age			

Note: Reference categories are age 18, White, lives in suburban area, lives with two biological parents, parent married at age 26 or older, and mainline Protestant. Controls missing information are included in the model but are not displayed. Analysis is based on 63,889 person-years contributed by 14,165 individuals. $e^{\beta} =$ exponentiated β .

allows us to retain all individuals in the Add Health sample, irrespective of age, and to predict the timing of marriage during early adulthood, not just its occurrence. Table 3 indicates that marriage was slightly less likely at age 19 than at age 18 and substantially more likely at age 23. The hazard of marriage for other ages was similar to age 18. This baseline hazard likely demonstrates the powerful effects of school enrollment on early marriage, with a dip in the risk of early marriage in the first year of postsecondary education (age 19) and a spike in the year following a traditional college student's graduation (age 23). In interaction models (not shown), the hazard for women and respondents from the South was greater at ages 18 and 19 (just after high school) compared with men and respondents from outside the South, respectively. Additionally, respondents with a higher socioeconomic profile (higher parent education, higher income, college aspirations) were less likely to marry right after high school but more likely to marry around age 23 (after college).

The results in Table 3 also indicate that demographics and family characteristics were important predictors of early marriage at the beginning of the 21st century, as we might expect from the bivariate findings in Table 3. Not surprisingly, women were nearly twice as likely as men to marry earlier. Despite the strong main effect of gender on early marriage, the only significant interaction effects by gender were gender and race-ethnicity interactions (not shown). As Table 3 indicates, only African Americans were at lower risk than Whites to marry earlier, though interactions suggest that Black and Hispanic women were more likely than men of these race-ethnic groups to marry early. Black men, however, were still less likely than White men to marry early, and Hispanic men were more likely to marry early than White men.

Other demographic and family characteristics played a prominent role in early marriage as well. People who grew up in the South were more likely to marry at younger ages than those from other parts of the country, net of correlated factors such as urbanicity and religious affiliation. Similarly, young adults who grew up in rural areas were also more likely to marry younger than those from the suburbs. Parental socioeconomic status and marital characteristics also influenced marital timing. The odds of a young person whose parents have a college degree marrying early were 33% lower than those of their counterparts, and young adults from families in higher

p < .05. *p < .01. **p < .001.

income categories also had lower odds of earlier marriage. Young adults from different family structures did not vary in their marital timing, but parental marital timing did predict early marriage. People whose parent married at age 22 or younger were far more likely to marry young themselves. Notably, this was one of the strongest predictors of early marriage.

Religious traditions were also important factors in marriage during early adulthood, even after accounting for other factors that might explain the associations, such as race, region of residence, and religiosity (among others). Young adults who grew up as conservative Protestants, Mormons, and adherents to "other" religions were all more likely to marry at younger ages than were mainline Protestants. Catholics were less likely than mainliners to do the same, whereas Black Protestants, Jews, and unaffiliated young adults had similar odds of earlier marriage as mainline Protestants (though the Jewish null finding is likely attributable to a small *n* problem).

Personal characteristics, such as religiosity, educational characteristics, and cohabitation history, also appeared to be associated with early marriage. Young adults who reported higher religious salience during adolescence, earned a highschool diploma, and cohabited married earlier, whereas those with higher high school GPAs and educational aspirations had a lower likelihood of earlier marriage. Although it would be easy to conclude from Table 3 that religious service attendance and abstinence pledging did not "matter" for early marriage, this is not quite true. Separate models (not shown) revealed that both church attendance and pledging did hasten marriage, but that the effect of these characteristics was attenuated by religious salience. Put differently, the influence of religious service attendance and abstinence pledging on early marriage was explained by underlying internal religious commitment. Despite the significance of all these personal characteristics, however, they did not explain away the robust effects of demographics and family characteristics.

DISCUSSION

Although much attention has been paid to the increasing age at first marriage in the United States, many Americans continue to marry at young ages. More than one quarter of young women and more than 15% of young men marry before their 23rd birthday. Given early mar-

riage's known association with marital dissolution, it is important to pay adequate attention to these individuals who marry in early adulthood. By documenting the prevalence of early marriage and identifying the factors associated with it in a contemporary sample of young adults, this study adds to the understanding of marriage during the transition to adulthood and highlights the need to pay due attention to the segment of the population that marries young.

In general, the findings presented here suggest that despite significant and substantial changes in union formation behavior among young adults, the factors that predict early marriage have remained fairly constant across the last several decades. In the absence of trend data, it is impossible for us to say whether the effects of these factors have weakened, but they nonetheless remain evident in the Add Health study. Indeed, we found at least partial support for each of our hypotheses except the cohabitation hypothesis. The findings for gender and race-ethnicity, geography, family socioeconomic status, parent marital characteristics, religious affiliation, religious behaviors and attitudes, and education are all largely (though not perfectly) consonant with previous findings dating back to the 1970s.

A few of these findings merit further discussion. First, the finding that young adults who cohabit are more likely to marry early is the opposite of what we expected, yet is not inexplicable. Even though a decreasing proportion of cohabitations are resulting in marriage during young adulthood (Schoen et al., 2007), young adults who cohabit are still more likely to move into marriage at younger ages than those who remain single. Thus, for at least a minority of cohabitators during early adulthood, cohabitation can be viewed as a precursor to marriage. Second, the finding that religious salience during adolescence leads to earlier marriage is notable for at least two reasons: It suggests that (a) previous studies that have examined only church attendance as a measure of personal religiosity (e.g., Lehrer, 2004) may have overlooked the multidimensional aspect of religion, and (b) religiosity's influence on early marriage may be less about the social control that comes with participation in a religious community and more about the internalization of religious teachings and norms about marriage. Third, the increased likelihood that young adults with a high-school diploma will marry early corroborates other research that suggests a stable financial status is a necessary prerequisite for marriage (Edin & Kefalas, 2005; Smock et al., 2005).

This study also highlights the persistence of demographic and family characteristics in predicting early marriage. Although some family background factors like resources and structure may have less of an influence on marital timing now than in the past (South, 2001; Wolfinger, 2003), demographic and family characteristics are robust to controls for a number of personal characteristics and even overshadow those personal characteristics. In other words, although young adults may be less susceptible to exogenous characteristics than in the past when it comes to early marriage, they are still quite susceptible to them. Personal characteristics, although important, do not appear to be the driving factor behind marriage in early adulthood.

Lastly, this study reveals that early marriage continues to occur predominantly among young adults from disadvantaged backgrounds. The typical early married is a White, rural southerner from a low-SES family with a relatively low educational trajectory. This is not the disadvantaged American typically addressed in sociological and demographic research, but these persons are nevertheless a significant minority of the United States population. Substantial attention has (rightly) been paid to the retreat from marriage among the disadvantaged in urban settings (e.g., Carlson, McLanahan, & England, 2004; Edin & Kefalas, 2005; Gibson-Davis, Edin, and McLanahan, 2005), yet comparatively little consideration has been given to the disadvantaged individuals in rural and southern areas who embrace marriage at an early age — even though they are the most likely to do so. Early marriage comes with its own set of difficulties, however, and if understanding and supporting all marriages — be they early, normative, or late — is a goal of scholarship and policy, this population should garner more attention from both researchers and policymakers. Simply put, researchers and policymakers need to ask not only why people, especially disadvantaged people, *don't* get married, but also why they *do*.

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REFERENCES

- Alexander, K. L., & Reilly, T. W. (1981). Estimating the effects of marriage timing on educational attainment: Some procedural issues and substantive clarifications. *American Journnal of Sociol*ogy, 87, 143 – 156.
- Aquilino, W. S. (1991). Family structure and homeleaving: A further specification of the relationship. *Journal of Marriage and the Family*, 53, 999 – 1010.
- Axinn, W. G., & Thornton, A. (1992). The influence of parental resources on the timing of the transition to marriage. *Social Science Research*, *21*, 261 285.
- Booth, A., & Edwards, J. N. (1985). Age at marriage and marital instability. *Journal of Marriage and the Family*, 47, 67 75.
- Bramlett, M. D., & Mosher, W. D. (2002). Cohabitation, marriage, divorce, and remarriage in the United States. *Vital and Health Statistics* (vol. 23, issue 22). Hyattsville, MD: National Center for Health Statistics.
- Brückner, H., & Bearman, P. S. (2005). After the promise: The STD consequences of adolescent virginity pledges. *Journal of Adolescent Health*, 36, 271 – 278.
- Bumpass, L. L. (1990). What's happening to the family? Interactions between demographic and institutional change. *Demography*, 27, 483 498.
- Bumpass, L. L., Sweet, J. A., & Cherlin, A. (1991). The role of cohabitation in declining rates of marriage. *Journal of Marriage and the Family*, 53, 913 927.
- Carlson, M., McLanahan, S., & England, P. (2004). Union formation in fragile families. *Demography*, 41, 237 261.
- Casper, L. M., & Bianchi, S. M. (2002). Continuity and change in the American family. Thousand Oaks, CA: Sage.

- Cohen, J., Cohen, P., West, S., & Aiken, L. (2003). Applied multiple regression/correlation analysis for the behavioral sciences (3rd ed.). Mahwah, NJ: Erlbaum.
- Edin, K., & Kefalas, M. J. (2005). Promises I can keep: Why poor women put motherhood before marriage. Berkeley, CA: University of California Press.
- Gibson-Davis, C. M., Edin, K., & McLanahan, S. (2005). High hopes but even higher expectations: The retreat from marriage among low-income couples. *Journal of Marriage and Family*, 67, 1301 – 1312.
- Glick, J. E., Ruf, S. D., White, M. J., & Gold-scheider, F. (2006). Educational engagement and early family formation: Differences by ethnicity and generation. *Social Forces*, 84, 1391 1415.
- Goldscheider, F. K., & Goldscheider, C. (1993). Leaving home before marriage: Ethnicity, familism, and generational relationships. Madison, WI: University of Wisconsin Press.
- Goldscheider, F. K., & Goldscheider, C. (1998). The effects of childhood family structure on leaving and returning home. *Journal of Marriage and the Family*, 60, 745 756.
- Goldscheider, F. K., & Waite, L. J. (1986). Sex differences in the entry into marriage. American Journal of Sociology, 92, 91 109.
- Johnson, T., & Dye, J. (2005). Indicators of marriage and fertility in the United States from the American Community Survey: 2000 to 2003. Retrieved April 13, 2007, from http://www.census.gov/population/ www/socdemo/fertility/mar-fert-slides.html.
- Lehrer, E. L. (2004). The role of religion in union formation: An economic perspective. *Population Research and Policy Review*, 23, 161 – 185.
- Lesthaeghe, R., & Surkyn, J. (1988). Cultural dynamics and economic theories of fertility change. *Population and Development Review*, 14, 1 45.
- Lloyd, K. M., & South, S. J. (1996). Contextual influences on young men's transition to first marriage. *Social Forces*, 74, 1097 1119.
- McLaughlin, D. K., Lichter, D. T., & Johnston, G. M. (1993). Some women marry young: Transitions to first marriage in metropolitan and nonmetropolitan areas. *Journal of Marriage and the Family*, 55, 827 838.
- Michael, R. T., & Tuma, N. B. (1985). Entry into marriage and parenthood by young men and women: The influence of family background. *Demography*, 22, 515 – 544.
- Raley, R. K. (2000). Recent trends in marriage and cohabitation: The United States. In L. Waite, C. Bachrach, M. Hindin, E. Thomson, & A. Thornton (Eds.), *Ties that bind: Perspectives on marriage*

- and cohabitation (pp. 19 39). Hawthorne, CA: Aldine de Gruyter.
- Schoen, R., Lansdale, N. S., & Daniels, K. (2007). Family transitions in young adulthood. *Demogra-phy*, 44, 807 – 820.
- Seltzer, J. A., Bachrach, C. A., Bianchi, S. M., Bledsoe, C. H., Casper, L. M., Chase-Lansdale, P. L., et al. (2005). Explaining family change and variation: Challenges for family demographers. *Journal of Marriage and Family*, 67, 908 – 925.
- Smith, T. E., & Hooker, E. (1989). Sex differences in marriage and parenthood as factors impeding educational attainment. *Sociological Inquiry*, 59, 343 – 354.
- Smock, P. J., Manning, W. D., & Porter, M. (2005). "Everything's there except money": How money shapes decisions to marry among cohabitors. *Journal of Marriage and Family*, 67, 680 – 696.
- South, S. J. (2001). The variable effects of family background on the timing of first marriage: United States, 1969 1993. *Social Science Research*, *30*, 606 626.
- Steensland, B., Park, J., Regnerus, M., Robinson, L., Wilcox, B., & Woodberry, R. (2000). The measure of American religion: Toward improving the state of the art. *Social Forces*, 79, 291 – 318.
- Teachman, J. D. (1983). Early marriage, premarital fertility, and marital dissolution: Results for Blacks and Whites. *Journal of Family Issues*, 4, 105 126.
- Teachman, J. D., Tedrow, L. M., & Crowder, K. D. (2000). The changing demography of America's families. *Journal of Marriage and the Family*, 62, 1234 1246.
- Thornton, A. (1991). Influence of the marital history of parents on the marital and cohabitational experiences of children. *American Journal of Sociology*, 96, 868 894.
- Thornton, A., Axinn, W. G., & Hill, D. H. (1992). Reciprocal effects of religiosity, cohabitation, and marriage. *American Journal of Sociology*, 98, 628 651.
- U.S. Census Bureau. (2006). *America's families and living arrangements*, 2006. Retrieved December 18, 2007, from http://www.census.gov/population/www/socdemo/hh-fam/cps2006.html.
- Waite, L. J., & Spitze, G. D. (1981). Young women's transition to marriage. *Demography*, 18, 681 – 694.
- Wolfinger, N. H. (2003). Parental divorce and offspring marriage: Early or late? *Social Forces*, 82, 337 – 353.
- Xu, X., Hudspeth, C. D., & Bartkowski, J. P. (2005). The timing of first marriage: Are there religious variations? *Journal of Family Issues*, 26, 584 618.