"Bad Jobs" for Marriage:

Relationship between Job Quality and Marriage in the Context of Labor Market Changes

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Abstract: Using the National Longitudinal Survey of Youth (NLSY79) from 1979 to 2008, this paper examines the extent to which job quality and the unequal distribution of "bad jobs" (i.e., those that offer low wages and do not provide access to health insurance and pension benefits) across different sub-groups are associated with first marriage during a time of deteriorating job quality. Results from discrete-time hazard models show that failure to secure a high-quality job delays first marriage among men, but not women. Also, job quality partially explains educational differences in first marriage for both men and women, especially those with less education. However, differences in job quality do not explain the racial gap in marriage. Black men and women are still much less likely than whites to marry even after taking job quality into account. This study represents one of the first empirical tests of the hypothesis that job quality in the context of labor market uncertainty is a key factor for understanding marriage behaviors. Beyond theory, this study can also inform policy debates surrounding the relationship between marriage and well-being and increasing inequality in the U.S.

Over the past few decades, we have observed dramatic changes in marriage in the United States, as well exemplified by delayed marriage and increasing cohabitation (e.g., Casper and Bianchi 2002). At the same time, marriage behaviors have increasingly diversified in such a way that behaviors with potentially negative consequences (e.g., divorce, nonmarital childbearing) tend to be more concentrated among the disadvantageous (e.g., McLanahan 2004) and certain minority groups, in particular among African Americans (Ruggles 1994).

One of the core explanations for these marriage behaviors has emphasized the importance of economic factors in the context of the changing labor market. For instance, some have argued that uncertainty in the labor market, has altered the nature of marriage bargain and lengthened the duration of spouse search (Oppenheimer 1988). The importance of economic factors for marriage has also become increasingly similar for men and women over time (Sweeney 2002; White and Rogers 2000). In addition, the deteriorating economic standing of men, especially those with low education and low skills, are linked to delayed and less marriage and thus have contributed to educational and racial differentials in marriage (Becker 1981; Oppenheimer, Kalmijn, and Lim 1997; Wilson 1987).

Family literature is, however, limited in that most studies conceptualize people's economic circumstances very narrowly, with a primary focus on income and education, often to the exclusion of employment (White and Rogers 2000). As a consequence, potentially important differences in employment characteristics and job quality have been largely ignored in much previous research (White and Rogers 2000). This is unfortunate given that employment status and characteristics play a key role in determining individuals' economic well-being (e.g., Blank 2009) and that the labor market has changed in a way which has increased diversity and

differentials in employment in terms of both economic (e.g., wages, fringe benefits) and noneconomic aspects (e.g., job stability).

In this study, I begin to fill this gap by using nationally representative longitudinal data (NLSY79) during the period of substantial labor market change (1979 to 2008) to examine the extent to which the quality of jobs that individuals have are associated with the transition to first marriage. Specifically, I utilize a measure for "bad job" quality which considers wages and the provision of health insurance and pension benefits and examine whether the relationship between job quality and marriage differs by gender and race. I also test the degree to which differences in job quality might be able to explain educational and racial differentials in marriage. As the first study to incorporate the measures of "bad job" quality in family formation, my dissertation contributes to the theoretical discussions of the causes of family inequality since deteriorating job quality and increasing labor market inequality have been hypothesized as leading influences on marriage but have not yet been empirically tested. Considering the empirical evidence on the benefits of marriage for various life outcomes (e.g., Waite and Gallagher 2000) and policy efforts to promote healthy marriage, my research can also inform policy debates surrounding the linkages between work, family, and the well-being of both adults and children, as well as the implications of these relationships for the increasing inequality in the U.S.

Changes in marriage behaviors

Marriage behaviors in the U.S. in the late twentieth century have changed substantially. First marriage rates, for instance, have consistently declined, while the percentage of adults who had never married rose from 5 to 19 between 1970 and 2000 (Fischer and Hout 2006; Fitch and Ruggles 2000). Similarly, the median age at first marriage rose by about four years during the same period (Fischer and Hout 2006; Fitch and Ruggles 2000). Changes in marriage have been

the subject of concern since marital status is closely related to the well-being of both adults and children, including economic well-being, physical and psychological health (e.g., McLanahan 2004; Waite and Gallagher 2000). Public discussion about "American family decline" and the "Marriage movement" demonstrate scholarly and policy concerns about changes in marriage and their impact on life outcomes of family members (e.g., Cherlin 2004; Popenoe 1993).

In addition to the magnitude and pace of changes in marriage, demographic data worryingly indicates that there are substantial socioeconomic differentials in the patterns of marriage behaviors. Most notable is the divergence by educational attainment. Those with less than high school education are increasingly likely to live outside marital union while college graduates are more likely to enter and stay in marriage than their counterparts with lower levels of education (e.g., Fischer and Hout 2006; McLanahan 2004). Also, educational homogamy in marriage has increased from 1960 to early 2000s, reflecting decline in the odds of marriage between those with low levels of education and those with more education (Schwartz and Mare 2005). As a result, the marriage market seems to consist of three groups, that is, college graduates, those with high school degree and/or some college education, and those with less than high school education (for a review, see Cherlin 2010).

At the same time, differences in the pattern of marriage have widened across racial/ethnic groups, in particular between African Americans and whites. For instance, only 52% of non-Hispanic black women are expected to marry by age 30 in contrast to 81% of non-Hispanic white and 77% of Hispanic women (Bramlett and Mosher 2002). This marital division by race and ethnicity implies that the "deinstitutionalization" of marriage might be more pronounced among African Americans than other groups (Cherlin 2004; Kreider and Simmons 2003).

Job quality and the transition to first marriage

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There are several theoretical reasons to expect that job quality may be an important indicator for the transition to marriage and that decline in job quality may help explain subgroup differences in marriage. In the family literature, economic resources and prospects are hypothesized to be a key factor in marriage formation. As an important source of economic resources and an indicator of one's labor market status, an individual's job quality may exert substantial influence on their prospects of union formation (e.g., Oppenheimer, Kalmijn, and Lim 1997).

In addition to economic rewards, job quality might be important for marriage due to its symbolic meaning as an indicator of the economic feasibility of marriage. The economic bar for marriage seems to have been raised as marriage has increasingly come to be seen as a "marker of prestige," and the "attainment of a prestigious, comfortable, and stable style of life" (Cherlin 2004). Indeed, evidence from ethnography and qualitative studies suggests that people's perception of economic "readiness" for marriage is multidimensional and involves job quality and a good career, which is much broader than income and education, the conventional measures for economic prospects (e.g., Edin and Kefalas 2005; Smock, Manning, and Porter 2005).

Furthermore, having a good quality job becomes more important for family formation considering the economic climate in recent decades. One of the most prominent theories on marriage pointed out that increasing labor market uncertainty and inequality may have altered the nature of marriage bargain and lengthened the spousal search (Oppenheimer 1988; 1997). In this context of labor market uncertainty, failure to secure a "good job" signals economic risk and insecurity – both currently and future – and may deter family formation.

Evaluating how job quality is associated with transition to marriage may also help understand subgroup differentials in marriage formation that we have observed. For example, theories suggest that both men and women's economic status have become important as the

model of marriage shifted from specialization to cooperation (e.g., Oppenheimer 1988; Sweeney 2002). However, empirical evidence is inconsistent with regard to the effects of women's economic power on their likelihood of marriage (e.g., Xie et al. 2003). This inconsistency might result from different expectations and norms of provider roles by gender, probably set higher for men than for women (e.g., Christiansen and Palkovitz 2001). There is supporting evidence for this possibility that expectations for men as a provider include employment stability, fringe benefits, assets as well as income, often showing stronger association than women (e.g., Edin and Kefalas 2005; Schneider 2011; Smock et al. 2005)

Differences in job quality may also account for educational differentials in marriage behaviors. One characteristic feature in the labor market during the past several decades has been segmentation by skill level and polarization in job quality (Autor, Katz, and Kearney 2006; Kalleberg 2011). This has led those with low education, especially sparsely educated men, to lose substantial ground in the labor market (Autor, Katz, and Kearney 2006). To the extent that education is associated with the quality of jobs that individuals have, therefore, evaluating how job quality is related to marriage can increase our understanding of what drives educational differentials in marriage.

Looking at job quality might be also fruitful to understand factors responsible for racial differentials in marriage formation. Black men were particularly vulnerable to labor market changes in recent decades, and the erosion of black men's economic status may be contributing to reduced marriage rates among blacks (e.g., Wilson 1987). Ethnographic studies further show that African Americans tend to consider economic stability more important than whites and that black women are reluctant to marry men who possess fewer economic resources compared to white women (e.g., Bulcroft and Bulcroft 1993).

Conceptualization of job quality

In this study, I define "bad" jobs which provide low wages and lack health insurance and a

pension plan (e.g., Kalleberg, Reskin, and Hudson 2000; Kristal, Cohen, and Mundlak 2011;

Schmitt 2007). Wages are a well-established indicator of job quality which directly represent

economic rewards, and they have become more important as economic inequality and insecurity

have increased in recent decades. The next two indicators, health insurance and retirement

pensions, are among the most prominent fringe benefits of employment and account for a

substantial proportion of the economic rewards of work (Kalleberg 2011). Beyond economic

compensation, the provision of health insurance and a pension plan are good barometers of job

quality since benefits are often determined by structural factors and reflect a different dimension

of rewards, distinctive from earnings (e.g., Kristal, Cohen, and Mundlak 2011). Adding the

provision of these fringe benefits as a criterion for determining job quality is particularly

appropriate in the U.S. context where many key benefits are typically provided through

employment rather than through centrally public health or retirement programs. Indeed, a "real

job" is often the job that provides health insurance and pension benefits in workers' conception

(Kalleberg 2011).

In addition to increasing income inequality, the proportion of workers who have received

health insurance and a pension plan through their employment has declined over time. As a

result, the distribution of benefits has become unequal in recent decades (Ellwood et al., 2000).

Because declines in employer-provided health coverage and pension benefits are most

pronounced among low wage jobs, the provision of these benefits, in conjunction with earnings

inequality, has contributed to the polarization of job quality (Kalleberg 2011). Therefore,

combining wages and the provision of health insurance and pension benefits is a fruitful way to

differentiate job quality in that they together represent economic and noneconomic aspects of a particular job (e.g., Kalleberg, Reskin, and Hudson 2000; Schmitt 2007) and further represent structured positions in the labor market (Kristal, Cohen, and Mundlak 2011). For these reasons, wages and fringe benefits are widely used indicators of job quality (e.g., Kalleberg, Reskin, and Hudson 2000; Schmitt 2007).[1] Using information on wages and the provision of health insurance and pension plan, I created a composite measure of "bad job" quality in this study (see below for details).

Data and methods

Data come from the National Longitudinal Survey of Youth (NLSY79). NLSY79 is a longitudinal survey of men and women born in the years 1957-64 (ages 14 to 22 years old in 1979) and provides information updated annually (biennially after 1994) on labor market activities and other significant life events. In order to fully capture marital and employment history, I use data from 1979 to 2008 (i.e., the first wave to the most recent wave available at the time of data analysis). The analytical sample comprises a total of 49,528 person-years of records for never-married men (27,273) and women (22,255) who are at risk of first marriage.

In this analysis, I use discrete-time hazard models for predicting transition into first marriage. Estimating discrete-time hazard is appropriate given the outcome of interest and the nature of the data (i.e., annual survey). This method also allows me to examine how individuals' entry into marriage varies in relation to their job quality while also taking the role of age (baseline hazard) into account. Based on the results of preliminary analyses, I specify the baseline hazard of first marriage using linear and squared measures of age.

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[1] Also, for practical reasons, wages and the provision of fringe benefits are the most widely available indicators in NLSY79 and other individual-level panel data.

The risk for first marriage is assumed to start at age 18 and individuals in the analytic

sample are censored at the earliest of the following three events: first marriage, loss to follow-up,

or the most recent survey in 2008. Time-varying independent variables and covariates are

measured in year (t-1). First marriage is defined when a respondent was classified as never-

married in the previous survey year (t-1) but is married in the survey year (t).

As noted, "bad jobs" are defined as which provide low wages and lack health insurance

and a pension plan (e.g., Houseman and Osawa 2003; Kalleberg, Reskin, and Hudson 2000).

Low wages are constructed as a dichotomous variable and coded as 1 if respondents' hourly

wages are located in the bottom quintile of a distribution of the hourly wages for all respondents'

jobs in a given year, calculated separately by gender (Kalleberg et al., 2000). The provision of

health insurance and pension plan are created as dichotomous variables (1 = yes) using

information on fringe benefits for each job that a respondent has. I then created a composite

measure of "bad job" if respondents' jobs provide low wages and no health insurance and

pension plan. When information on the provision of pension plan is not available (before 1986), I

used two criteria for defining "bad job", i.e., low wages and health insurance coverage. Those

who are employed but whose jobs do not have all of the three bad job characteristics, (e.g., low

wages, but with health insurance and pension benefits), are classified as having not a bad job

(reference group). Since unemployment is negatively associated with marriage (e.g., Sweeney

2002), I also include the third category of those not employed.[2]

Models also include controls that might be related to both job quality and marriage (e.g.,

Michael and Tuma 1985; Sweeney 2002). Specifically, I include economic covariates associated

with marriage formation (e.g., educational attainment, enrollment status), demographic

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[2] This group consists of those unemployed and out of labor force, who were collapsed into one
group due to relatively small numbers.

characteristics (age, urban/rural residence, race, gender, parenthood, experience of premarital cohabitation), and family background characteristics (mother's education, family structure at age 14). Except for race, gender, and family background characteristics, all controls are time-varying, measured at the previous survey year prior to the year of first marriage.

Results

Table 1 presents sample characteristics, by race and gender. On average, 7.5% of respondents marry in a given year but there are substantial racial differentials. Both black men and women are much less likely than their white counterparts to enter marital union. The distribution of job quality shows similar racial differentials: among those employed, blacks have inferior job quality compared to whites, with particularly highest proportion of having "bad jobs" among black males (23% of employed black men, author's tabulation). In addition to differences in job quality, white men and women are more likely than black men and women to be employed. Turning to educational attainment and enrollment status, there are again contrasting racial differences, which are larger than gender differences. The proportion of respondents who reported having lower rates of education attainment (i.e., having completed less than high school) is much higher among blacks and the proportion of having university education among whites is more than twice compared to blacks. Also, white men and women are as twice as likely to be enrolled in school.

Family characteristics also show divergences along racial categories. More than two thirds of white men and women were in intact families at age 14, in contrast to about half of black men and women. Blacks, both men and women, also come from more disadvantaged families, measured by mother's educational attainment. Lastly, black men and women tend to

reside in urban areas and are much more likely to have a child(ren).[3] These contrasting racial

differentials between whites and blacks in marriage, job quality, education, and family

characteristics are consistent with literature documenting the diverging patterns of family and

labor market behaviors between two groups.

Table 2 presents results from discrete-time hazard models to predict the likelihood of the

transition to first marriage in a given year. Given the nature of outcome variables, logistic

regression analysis is used. In light of the substantial gender and racial differentials in marriage

formation, I estimate models separately for white men, black men, white women, and black

women (e.g., Oppenheimer, Kalmijn, and Lim 1997; Sweeney 2002).[4] All models include age

and squared term of age (as a baseline hazard) and various controls that might be associated with

job quality and marriage, including human capital, demographic characteristics, and family

background. Coefficients are presented in terms of odds for easier interpretation.

According to results from the table 2, job quality is important for men's transition to first

marriage: for both black and white men, having a bad job is negatively associated with first

marriage (significant at $p<0.001$). However, the same association was not found among women.

In addition, unemployment decreases the odds of marriage significantly for all groups. The

difference in the odds of first marriage between those not-employed and the reference group (i.e.,

whose jobs are not "bad jobs") ranges from 28% (white women) to 60% (black men).

To further understand the extent to which differences in job quality explain educational

and racial differences in marriage, I conducted a second set of analyses (Table 3). Since

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[3] The higher proportion of parenthood among blacks results from the fact that the measure for parenthood indicates whether respondent has a child at interview (not a childbirth between interviews) and the fact that blacks usually begin childbearing earlier than whites. So this measure reflects cumulative parenthood in a given year.
[4] Due to the small sample size, I do not estimate models for Hispanics by gender.

empirical evidence on the effects of economic resources on marriage differs by gender, I

estimated models separately for men and women (e.g., Sweeney 2002). The first model estimates

the odds of first marriage, net of individual socioeconomic characteristics (e.g., education),

demographic characteristics (e.g., race), and family background (e.g., mother's education).

Linear and squared terms of age are also included to specify baseline hazard.

Results from Model 1 show that education is positively associated with first marriage for

both men and women. Compared to men with less than a high school education, high school

graduates are 17% more likely to marry, those with some college education are 32% more likely,

and college graduates are 200% more likely. Similarly, there is a significant, positive relationship

between women's education and first marriage. As for racial differences in first marriage, the

odds of first marriage are significantly lower for African Americans—both men and women—

compared to Whites. Black men are 38% less likely than white men, and black women are 45%

less likely than white women, to marry in a given year.

Model 2 adds employment status and job quality to evaluate whether differences in job

quality explain education and racial differentials in first marriage observed in the previous

model. Adding the measure for job quality reduces the odds of first marriage for all educational

groups, regardless of gender. More importantly, the statistical significance for high school

graduates (compared to those with less than high school education) disappears, while the

coefficients for those with some college and university education remain significant. These

changes suggest that differential job quality partially explains the lower likelihood of marriage

for men and women with lower education. Introducing job quality, however, does not explain the

significantly lower odds of marriage for black men and women observed in model 1.

Conclusions and discussion

Using nationally representative longitudinal data collected from mid-1970s to late 2000's during the period of deteriorating job quality, I examined how job quality is associated with the transition to first marriage, with a focus on racial and gender differentials. Given that the measure of "bad jobs" used in my analyses incorporates wages and the provision of health insurance and retirement plan and that these fringe benefits account for substantial economic compensation – both current and future –, this measure may be a better economic indicator than conventional measures for economic resources (e.g., income, employment status). More importantly, to the extent that wages and fringe benefits are correlated with other dimensions of job quality (e.g., job instability) (e.g., Kallberg et al. 2000), this measure might better capture the multidimensional nature of economic feasibility for marriage, as often implied in ethnographic and qualitative studies (e.g., Smock et al. 2005).

Results from the discrete-time hazard models show that for both men and women being not-employed decreases the likelihood of marriage but job quality matters *only* for men. This significant association between job quality and marriage holds for both white and black men. These findings confirm previous research that economic prospects are important for men's marriage formation (e.g., Oppenheimer et al. 1997), but their importance is somewhat inconsistent for women's entry to marriage (e.g., Xie et al. 2004). As discussed, this gender difference in the relationship between job quality and marriage may reflect persistently stronger expectations for men as a provider (e.g., Edin and Kefalas 2005), which include multiple economic dimensions beyond income and (un)employment. Alternatively, a shift in economic foundation of marriage from the model of specialization to that of cooperation is still in progress since ideational changes might require additional time to catch up. As seen from the debates about the "Stalled Revolution" and the "Second Shift," behavioral and ideational changes

surrounding women's employment and gender roles often do not occur concurrently between men and women (Hoschild and Machung 1989). Similarly, it is possible that a positive relationship between job quality and marriage has not yet emerged among women. Another possibility is that the lack of relationship between job quality and women's marriage is due to women's disproportionately taking family roles. In spite of high female labor force participation rates, women tend to make more adjustments than men with regard to their employment decisions. Overworking women, for instance, are more likely than men to temporarily or permanently leave the labor force or change work hours and schedules (e.g., Cha 2010). Such differential expectations for marital roles probably make job quality to be less important for women's transition to marriage relative to men's.

I also hypothesized that differential job quality may help explain educational differences in marriage. Consistent with this expectation, I found that for both men and women "bad job" quality helps explain the lower likelihood of marriage for those with lower education, i.e., high school degree. This result is consistent with recent trend that those without college education lost substantial ground in the labor market (e.g., Autor et al. 2006) and that job quality has been polarizing by the level of human capital (Holzer et al. 2011; Kalleberg, 2011).

However, I did not find evidence that differences in job quality explain the racial gap in marriage. Black men and women are still much less likely than whites to marry even after taking job quality into account. It is probable that other dimensions of job quality not captured by the definition of a "bad job" I've used in my analyses, e.g., direct measure of job instability, tenure, might be more appropriate for understanding marriage behaviors among blacks. Or gender differences might be more salient than racial differences in terms of the importance of having good quality jobs for marriage formation. In light of substantial racial differentials in marriage

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behaviors observed in the past several decades, additional future research is needed to further evaluate these possibilities.

Finally, I would like to conclude with the limitations of present study and suggestions for future research. First, I measured job quality using three indicators, i.e., low wages and the provision of health insurance and retirement plan. Although these indicators are widely recognized measures for job quality, they are far from exhaustive. Some researchers, for instance, pay attention to other indicators of job quality, e.g., union coverage, collective bargaining rights, fixed-term employment (e.g., Kalleberg et al. 2000). Most panel data including NLSY79 are limited in that they provide relatively few indicators of job quality. One fruitful way to address this limitation is to add indicators of job quality (e.g., average tenure and turnover rates) from other macro-level data sources (e.g., O'NET) to individual-level data. In addition, job quality might be a very subjective construct; therefore, characteristics such as job satisfaction, autonomy, perception of job stability that more directly reflect individuals' preference or priority would be helpful to examine how job quality affects marital decisions.

Second, I only examined how job quality is associated with the transition to first marriage and did not consider cohabitation. Marriage is the outcome that most theories have focused on; however, cohabitation should be also considered in the future studies considering the prevalence of cohabitation and evidence on the perceived economic bar for marriage among cohabitors (Smock et al. 2005).

Third, it is also worth noting that selection might be related to both individuals' job quality and their likelihood of marriage. I controlled for a range of compositional differences such as demographic, socioecomic, and family characteristics, but unobserved characteristics (e.g., attitudes) might still be responsible for the relationship between job quality and marriage

formation. Future studies which more explicitly deal with unobserved heterogeneity, e.g., fixed-effects models, will help show the extent to which selection plays a role in the association between job quality and marriage behaviors.

Finally, I examined how differences in job quality are associated with marriage by evaluating the experience of NLSY79 cohort. Built upon the findings from this study, comparing the experiences of multiple birth cohorts, e.g., using NLSY79 and NLSY97, will be useful to evaluate the extent to which changes in job quality contributed to changes and inequality in marriage in the U.S.

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Table 1: Sample characteristics, by Race and Gender

	Total	White Men	Black Men	White Women	Black Women
Variables					
Marriage	7.46	8.91	4.57	10.97	4.63
Job quality					
Not employed	13.98	5.93	15.69	9.06	28.04
Not a bad job	71.54	80.25	65.11	78.31	58.30
A bad job	14.48	13.82	19.20	12.62	13.66
Age	26.98	25.84	28.38	25.53	28.60
Education					
Less than high school	17.86	14.96	23.76	9.92	18.00
High school	41.71	40.94	49.11	37.67	41.74
Some college	25.50	24.31	20.23	27.80	29.01
University or more	14.94	19.79	6.90	24.60	11.25
Currently enrolled in school [a]	16.70	19.87	9.85	23.42	12.47
Ever cohabited [a]	16.31	11.09	21.22	17.23	16.59
Two-parent family at age 14 [a]	65.34	77.26	50.68	78.46	48.09
Mother's education					
High school or less	43.58	25.20	54.86	26.84	55.35
High school	38.23	49.97	33.35	45.36	31.98
Some college or more	18.19	24.83	11.79	27.80	12.67
Residence					
Urban [a]	83.43	78.87	83.86	80.33	83.95
Rural	16.57	21.13	16.14	19.67	16.05
Parenthood [a]	27.83	7.80	40.01	14.84	58.66
Number of person-years	58544	15917	11,356	11517	10738

Table 2: Odds-ratios of First Marriage Estimated from Discrete-Time Hazard Models, by Race and Gender

	White Men	Black Men	White Women	Black Women
Variables				
Job quality				
Not employed	0.451***	0.393***	0.714*	0.448***
	(0.078)	(0.074)	(0.102)	(0.062)
Not a bad job (omitted)				
A bad job	0.714***	0.645***	0.862	0.908
	(0.066)	(0.085)	(0.082)	(0.122)
Age	1.210***	1.067	1.059	0.877*
	(0.062)	(0.071)	(0.058)	(0.057)
Age (squared)	0.995***	0.998*	0.998*	1.001
	(0.001)	(0.001)	(0.001)	(0.001)
Education				
Less than high school (omited)				
High school	1.005	0.728*	0.868	0.810
	(0.092)	(0.092)	(0.110)	(0.125)
Some college	1.134	1.030	1.124	1.259
	(0.091)	(0.132)	(0.094)	(0.148)
University or more	1.504***	2.119***	1.272**	1.741***
	(0.123)	(0.328)	(0.116)	(0.282)
Currently enrolled in school [a]	0.737***	1.133	0.732***	0.798
	(0.064)	(0.182)	(0.060)	(0.117)
Ever cohabited [a]	1.037	1.226	1.041	1.292
	(0.109)	(0.158)	(0.101)	(0.189)
Two-parent family at age 14 [a]	1.127	1.076	1.053	1.056
	(0.079)	(0.098)	(0.084)	(0.100)
Mother's education				
Less than high school (omitted)	0.987	0.909	0.918	0.973
	(0.072)	(0.092)	(0.073)	(0.101)
High school (omitted)				
Some college or more	0.910	0.978	0.856*	0.934
	(0.063)	(0.133)	(0.062)	(0.140)
Residence				
Urban [a]	0.777***	0.971	0.952	0.846
	(0.053)	(0.130)	(0.077)	(0.110)
Parenthood [a]	0.823	1.274*	0.694**	1.284*
	(0.109)	(0.136)	(0.088)	(0.140)
Number of person-years	15917	11356	11517	10738
Log-likelihood	-4665.528	-2026.107	-3877.203	-1922.756

[a] : Dichotomous variable (10 = no; = yes)

Robust standard errors in parentheses

* p<0.05, ** p<0.01, *** p<0.001

Table 3: Odds-ratios of First Marriage Estimated from Discrete-Time Hazard Models, by Gender

	Men		Women	
	Model 1	Model 2	Model 1	Model 2
Variables				
Job quality				
Not employed		0.422***		0.537***
		(0.048)		(0.049)
Not a bad job (omitted)				
A bad job		0.698***		0.864*
		(0.048)		(0.063)
Age	1.125**	1.115**	1.016	1.010
	(0.041)	(0.041)	(0.039)	(0.039)
Age (squared)	0.997***	0.997***	0.998**	0.998*
	(0.001)	(0.001)	(0.001)	(0.001)
Education				
Less than high school (omited)				
High school	1.173*	1.095	1.292**	1.138
	(0.075)	(0.070)	(0.108)	(0.096)
Some college	1.320***	1.203*	1.571***	1.331**
	(0.100)	(0.091)	(0.145)	(0.125)
University or more	2.000***	1.777***	1.949***	1.648***
	(0.169)	(0.151)	(0.204)	(0.175)
Currently enrolled in school [a]	0.683***	0.745***	0.742***	0.771***
	(0.048)	(0.053)	(0.049)	(0.051)
Race				
White (omitted)				
Black	0.618***	0.651***	0.549***	0.574***
	(0.036)	(0.038)	(0.035)	(0.036)
Ever cohabited [a]	1.117	1.109	1.109	1.091
	(0.083)	(0.082)	(0.082)	(0.081)
Two-parent family at age 14 [a]	1.130*	1.103	1.084	1.071
	(0.057)	(0.056)	(0.060)	(0.059)
Mother's education				
High school or less	0.913	0.938	0.959	0.981
	(0.049)	(0.050)	(0.055)	(0.056)
High school (omitted)				
Some college or more	0.916	0.922	0.847**	0.855*
	(0.055)	(0.055)	(0.053)	(0.054)
Residence				
Urban [a]	0.833**	0.809***	0.925	0.907
	(0.048)	(0.047)	(0.061)	(0.060)
Parenthood [a]	1.005	1.016	0.810**	0.913
	(0.072)	(0.072)	(0.056)	(0.065)
Number of person-years	27,273	27,273	22,255	22,255
Log-likelihood	-8010.495	-7964.266	-6881.799	-6853.851

[a] : Dichotomous variable (10 = no; = yes)

Robust standard errors in parentheses

* p<0.05, ** p<0.01, *** p<0.001