

Maternal Union Status and Youth Educational Attainment: Does Age at Birth Matter?

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Abstract

Recent demographic trends indicate declines in teen childbirth, increases in non-marital childbearing, and shifts to more births to women in their twenties. Using data from the linked Children and Young Adult sample (N=2,865) of the NLSY79, this study examines the potential benefits to the offspring of women who delay childbirth. We investigate whether the children born to mothers who delay childbirth into their early and late twenties have more positive educational outcomes compared with children born to teen mothers. Results suggest youth born to teen and young adult mothers are less likely to graduate from high school than youth born to older mothers. And, this association remains robust to mother's marital status at birth. Our results highlight the diverging destinies faced by youth born to teen mothers and older mothers, but suggest that those born to young adult women (in their early 20s) may also face educational disadvantage.

An extensive body of literature has documented the disadvantages faced by children born to teen parents (Hardy et al., 1998; Haveman, Wolfe, and Peterson, 1997; Hofferth and Reid, 2002; Hoffman and Maynard, 2008; Wildsmith et al., 2012). In recent years, efforts to reduce teen pregnancy and childbearing in the United States have borne fruit; as of 2010, the proportion of first births to teenagers dropped to record low levels, for all race and ethnic groups (Hamilton and Ventura, 2012). American women were increasingly deferring childbearing into their twenties (Ventura, 2009). The benefit of deferring childbearing for a year or two beyond the teen years, however, has not been adequately assessed. Some studies find that first children born to women in their early twenties also suffer some of the negative outcomes associated with teen childbearing (Francesoni, 2008; Levine, Pollack, and Comfort, 2001), such as having lower levels of educational attainment and higher levels of idleness.

Another important factor in considering the effect of teen childbearing or fertility delay is the interdependence of age at first birth and marital status at first birth. In the early 1970s, when half of all women were married by age 21 (United States Census Bureau, 2006), non-marital births were less prevalent; yet half of all nonmarital births were to women in their teens (Ventura, 2009), and a large proportion of teen marital births were the result of post-conception marriages (Bachu, 1999). In the intervening decades, non-marital childbearing has increased dramatically. The vast majority of births to teenagers nowadays are to unmarried women

(Ventura, 2009), and over half of births (60%) to women in their early twenties are to single women, though a substantial proportion were cohabiting with their partner at the birth of their child (Lichter, Sassler, and Turner, 2014). Research documenting the disadvantages associated with being raised in single parent families is also vast; such youth demonstrate poorer outcomes in adolescence and young adulthood, including lower levels of educational engagement and attainment (Amato, 2005; Brown, 2006; Ermisch and Francesconi, 2001; Sassler, Williams, Addo, Frech, and Cooksey, 2013).

The confluence of the decline in teen childbearing, the rise in non-marital childbearing, and the shift to more births to women in their twenties suggests the need to reassess the association between maternal age at birth and youth outcomes. In particular, we ask whether youth born to mothers in their early twenties are more similar to those born to teen mothers than the literature has presumed. In this paper, we explore the association between maternal age and marital status at birth and young adults' likelihood of graduating from high school. In particular, we examine whether young adults benefit if mothers delayed fertility beyond their teen years. Next, we assess the extent to which maternal marital status at birth conditions the association between maternal age at birth and high school completion. Our third research question evaluates whether the associations between maternal age at birth, marital status at birth, and high school graduation differ by race and ethnic origin. Data are from the linked Children and Young Adult sample of the 1979 National Longitudinal Survey of Youth (NLSY79), which has been extensively utilized to explore the intergenerational reproduction of family structure and child and youth well-being in the United States (Cherlin, Kiernan, and Chase-Lansdale, 1995; Cooksey, Mott, & Neubauer, 2002; Fomby & Cherlin, 2007; Hofferth and Goldscheider, 2010).

Literature Review

The Current Study: Questions and Hypotheses

In this study we address three basic questions. First, are there gradations in the impact of maternal age at birth on measures of youth achievement? That is, are youth born to mothers in their early twenties less likely to graduate from high school than those born to older mothers, and how do youth born to young adults fare relative to those whose mothers were teenagers when they were born? Second, does marital status at birth moderate the association between young maternal age at birth and high school completion? Do children born to married teen parents fare better than those born to single teen mothers, or are there distinctions by marital status of

mothers in outcomes for youth born to mothers in their early twenties? Finally, because the literature suggests that the effect of growing up with a single mother differs by race and ethnicity (Fomby and Cherlin, 2007; Fomby, et al., 2010; Heard, 2007), we also explore if the association of marital status with high school completion varies across race and ethnic groups.

Hypothesis 1: Our initial hypothesis is that young adults born to teen mothers as well as young mothers (those in their early 20s) will be less likely to graduate from high school than their counterparts born to older mothers. We also anticipate that young mothers may differ from teen mothers.

Hypothesis 2: Our second hypothesis is that maternal marital status will not differentiate the outcomes of youth born to teen mothers, though it may for those whose mothers were older (20 or more) at their birth, especially given age norms for first marriage during this time period. We also anticipate that marital status will further differentiate the outcomes of youth born to older mothers (those 25 and older).

Hypothesis 3: Because union status at birth and age norms regarding childbearing differ dramatically across race and ethnic groups, we also anticipate that the impact of teen and young adult parenting on high school completion will vary for White, Black, and Hispanic youth. Because non-marital childbearing is far more common among the African American community, and Black youth have long drawn on broader family networks to transition to adulthood than have White youth (e.g., Fomby & Cherlin, 2007; Heard, 2007), we expect a weaker association between maternal marital status and high school graduation for Blacks than for Whites. We are less clear regarding the associations for Hispanics, among whom consensual unions are more prevalent, relative to Whites, though we also anticipate a weaker association as a result.

Of course, maternal attributes may play influence youth's educational attainment in salient ways. Mothers whose own mothers had low levels of education, for example, or who themselves did not complete high school may lack the belief in the importance of educational attainment, and are not expected to encourage high educational aspirations in children (Ermisch & Fracesconi, 2001). Exposure to economic disadvantage – experiencing family disruption as a child, for example, or growing up in the highly segregated South among African Americans – may diminish a mother's ability to navigate the educational system if children experience challenges in school. We therefore include controls for mother's characteristics previously shown to influence family behavior: growing up in the South (Goldscheider & Sessler, 2006),

being foreign-born, and minority status. Previous research has also highlighted the importance of child gender and weight at birth as important indicators of subsequent child outcomes. Boys and those who at birth were low weight have poorer educational outcomes, which may accumulate over time to reduce the likelihood of completing high school (Duncan, Brooks-Gunn, & Klebanov, 1994; Kiernan & Mensah, 2011), and we control for these characteristics. Because they are ascribed or measured at birth, we argue that these two factors are not endogenous, though we initially run models without these variables to assess the impact of including them.

Analytic Approach

We begin by exploring the total sample of young adults who have reached (at least) age 19, and assess how youth born to teen and young adult mothers fare relative to their counterparts whose mothers were 25 years or older at their first birth. Our models present outcomes that focus solely on the impact of maternal age at birth on high school completion, and then include controls for maternal characteristics, young adult attributes, and finally, maternal marital status at birth. Next, we examine race specific analyses, before assessing interaction effects. We present results from logistic regression analysis of the effects of maternal age at birth and marital status, as well as our other controls, on young adults' likelihood of graduating from high school. We include both the coefficients and the odds ratios (the exponentiated coefficients, which can be interpreted as the change in the odds of graduating from high school associated with a one unit increase in the independent variable). An odds ratio greater than 1.0 indicates that the specified variable is associated with greater odds of graduating from high school than the reference category, while an odds ratio less than 1.0 denotes the odds of experiencing the event of interest is lower relative to the odds of the reference group.

DATA

Data are from the linked Children and Young Adult sample of the 1979 National Longitudinal Survey of Youth (NLSY79). Initial interviews were undertaken with 12,686 young men and women ages 14-22 in 1979. The sample initially incorporated oversamples of black, Hispanic, military and poor white oversamples, though the military and economically disadvantaged white oversamples were subsequently dropped. Main respondents have been retained and interviewed annually through 1994, and biennially since. Retention rates remain at over 80% of cases still eligible to be interviewed, and publicly released data on this cohort currently span about 30 years, with detailed union histories collected throughout the study. A

particular strength of the NLSY79 is the availability of linked data on all children born to the NLSY79 women. As of 1994 and continuing biennially, children aged 15 and older were interviewed as Young Adults. When weighted, the sample of children born to the women of the NLSY79 can be considered fully representative of children born to a nationally representative sample of women between the ages of 14 and 21 on December 31, 1978.

We construct our analytic sample in the following manner. Although the NLSY includes data on all children born to NLSY79 mothers, we limit all analyses to first born children so as not to violate assumptions of independence of observations.¹ Of **4,021 (52.8%)** NLSY79 women known to have had a child by **2010** while married or never married, 719 (17.9%) of the mothers did not consent to have their child interviewed (or their child did not consent at age 14). These cases are necessarily excluded from the analysis. We must also exclude from the analysis 100 (2.5%) first born offspring who were over the age of 18 in 1994, as they were missing information on young adult outcomes measured in adolescence (at age 14), and 337 (8.4%) who had not yet aged into the young adult sample as of **2010**. In total, there were 2,865 first born offspring of NLSY79 mothers eligible for our analyses.

Dependent Variable

We construct a measure of *high school graduation* based on three questions asked of young adults at each survey. Respondents reported the highest grade completed at each interview. They were then asked if they received a diploma or passed a GED examination, and if so, which one they had obtained. Those who answered affirmatively to receiving a diploma were designated as graduating from high school. Those who did not report receiving a diploma, or who did not answer the question about degree receipt ($n = 270$) were coded as not graduating from high school.

Independent Variables

Our primary independent variables of interest are the age of the mother at the birth of the child, and her marital status at the time of the birth. We utilize the age of the mother at the time of the birth to designate three age groups: teen (or adolescent) mothers are those who had their first-born child prior to turning 19; young adult mothers are those who bore their first child when they were between the ages of 20 and 24; adult mothers are those who were 25 years or older at the birth of their first child. As for maternal marital status, we denote those mothers as “single” if they had their first birth while never-married and lived with that child in her household. Our

final set of independent variables, race, is an ascribed characteristic, denoting the mother's race as non-Hispanic Black, Hispanic, and non-Hispanic White.²

Control Variables include a range of exogenous variables that capture indicators of the mother's socioeconomic status and socialization while growing up. To address the intergenerational transmission of family status, we utilize one measure of the educational attainment of the grandmother, which serves as a proxy for social status; maternal education may be endogenous with the birth of the young adult, if teen pregnancy curtailed the mother's educational pursuits. We therefore note if the maternal grandmother completed at least a high school degree (1 = completed at least 12 years of school). Another indicator of family socioeconomic status measures the family structure experienced by the mother; a dummy variable denotes the mother's family composition at age 14 (1 = lived with both biological parents). Some studies have indicated that those who grew up in the South adhere to different attitudes towards marriage and work for women, with women from the southern states marrying at younger ages (Sassler & Goldscheider, 2004); we therefore indicate if the mother was born in the South. Although the time period when the data were initially gathered precedes the rise in immigration to the United States, we also include a measure of the mother's nativity (1 = foreign born). Our last maternal measure takes advantage of the test of cognitive ability respondents took in 1980, the AFQT score, which ranges from 1 to 99.

Last, we include a limited number of indicators from the youth themselves. These include the sex of the child (1 = female) and whether the child was low-birth weight (1 = less than 5.5 pounds at birth). Because these variables may be exogenous, we run models for our multivariate analysis without youth characteristics, and then add them. Missing information on the explanatory variables was estimated using multiple imputed data created from the imputation using the changed equations (ICE) program for STATA (Royston, 2006) in order to maintain maximum sample sizes for all variables.

FINDINGS

Descriptive Results

Over three quarters of the young adults born to NLSY79 mothers, 77%, graduated from high school by age 20. Nonetheless, the proportion obtaining a high school diploma varied substantially by maternal age at birth, as depicted in Figure 1. Youth born to older moms were over twenty percentage points more likely to graduate from high school as were those born to

teen mothers (89.3% - 68.9%), and were more than ten percent more likely to finish high school as those born to mothers in their early twenties.

The impact of mother's marital status at the birth of their child appears to differ, however, by maternal age at birth (Figure 2). Overall, young adults whose mothers were married at the time they were born also had a considerable advantage over their counterparts born to unmarried mothers when it came to high school completion. But this difference was only significant among youth born to mothers who were in their early twenties at childbirth. Over four-fifths (81.2%) of youth born to married young adult mothers completed high school, compared to less than three-quarters (73.7%) of those born to single mothers in their early twenties, and this difference is significant at the .01 level. But youth born to unmarried teen mothers are not significantly less likely to graduate high school than those born to married teen mothers, and the difference among those born to older mothers also does not differ by maternal marital status at conventional levels of significance.

Descriptive statistics (means and standard deviations) for all variables by age at first birth are shown in Table 1. The majority of non-marital first births were to teen mothers. Other important distinctions appear, as well. Teen mothers were far less likely to have had a mother graduate from high school, had lower AFQT scores, were less likely to have grown up in an intact family, and were more likely to be Black, compared to mothers who had their first birth at later ages (25 or older). These factors may contribute to the intergenerational transmission of low educational attainment.

[Table 1 and Figure 1 and 2 about Here]

RESULTS

We first test whether variations in maternal age at birth matter for youth's likelihood of graduating from high school. Table 2 presents results from the logistic regression models comparing the relative risks of high school graduation for women born to adolescent and young adult mothers, relative to those born to mothers who had their first birth when they were age 25 or older. Model 1 shows the estimated effect of age at first birth before conditioning on background characteristics or marital status of the youth's mother at birth. The odds of graduating from high school among women born to older mothers are nearly four times that of youth born to teen mothers ($OR = 1/.265$ or 3.77), and over two times that of youth born to young adult mothers ($OR = 1/.447$ or 2.24), and these differences are highly significant. Youth

born to mothers who were in their early twenties at their birth also have a graduating advantage over their counterparts born to teen mothers, being 1.67 times more likely to graduate high school than youth born to teen mothers (results not shown).

Accounting for family background characteristics, as well as youth sex and birth weight, narrows the gap in the odds of graduating from high school between those born to older mothers and those born to adolescent and young adult mothers, but the difference remains large and significant (Model 2). Adding a control for marital status (Model 3) further reduces the gap in the likelihood of completing high school, but the difference still remains sizable. The odds of graduating from high school were 2.45 times greater than for youth born to teen mothers, and 1.57 times greater than youth whose mothers were in their early twenties at their birth. Furthermore, youth born to young adult mothers remain 1.40 times more likely to graduate from high school than youth born to adolescent mothers after including these controls.

Our second question asked whether marital status at birth moderated the association between young maternal age at birth and high school completion. Including a control for maternal marital status at birth (Model 3) reveals that marital status at birth is additive. Being born to an unmarried mother significantly reduces the odds of graduating from high school; youth born to married parents have odds of high school graduation that are 1.45 times that of their counterparts born to unmarried mothers. But while mother's marital status at birth is associated with youth's likelihood of graduating with a high school diploma, it does not greatly attenuate the impact of maternal age at birth. Youth born to adolescent or young adult mothers remain far less likely to graduate from high school than their counterparts born to older mothers. In other words, adjusting for mother's marital status at birth does not alter the significant association of maternal age at birth with educational outcomes.

Next, we assess whether the association of marital status with high school completion differs across race and ethnic groups. Table 3 presents results from our models, run separately for White, Black, and Hispanic youth. Three models are shown for each race group. The first analysis includes only controls for maternal age at birth, while Model 2 includes other background controls. Finally, Model 3 includes a dummy variable for maternal marital status at birth. Turning first to the results that account only for maternal age at birth (Models 1, 4, and 7) reveals that children born to older mothers (those 25 and older) are considerably more likely to graduate from high school, regardless of their racial or ethnic background. But the differences

between youth born to older mothers and teen mothers are the largest among Black young adults. Despite accounting for the smallest proportion of Black mothers (or perhaps because of it), young adults born to older mothers are 5.05 times as likely to obtain a high school degree as their counterparts who were born to teen mothers, and their odds of high school graduation are 2.91 times that of youth born to young adult mothers (those 20 to 24). Among Hispanics the odds of graduating high school among those born to older mothers are 3.57 and 2.38 times that of youth born to teen and young adult mothers, whereas among whites the oldest mothers were 3.37 times and 1.95 times more likely to receive a high school degree as youth born to teen or young adult mothers. Accounting for background characteristics (in Models 2, 5, and 8) reduces these age disparities, particularly for Black youth born to teen mothers, though they still remain quite sizable. Finally, including a measure of maternal marital status at birth reduces the age disparities even further (Models 3, 6, and 9), though they remain large and significant, and the sizable gap in the proportion graduating between to the oldest and youngest black mothers remains sizable.

Of note is that the impact of maternal marital status at birth differs across racial and ethnic groups. Whereas maternal marital status differentiates the graduation probability for White and Hispanic young adults, similar patterns are not observed for Black youth. That is, unlike their White and Hispanic counterparts, who are significantly more likely to graduate from high school if their mothers were married when they were born, maternal marital status is not a significant predictor of high school graduation among Black youth. In contrast, White youth whose mothers were married at their birth are 1.66 times more likely to complete a high school degree as White youth born to unmarried mothers, while Hispanic youth born to married mothers are 1.44 times more likely to graduate from high school as their counterparts born to unmarried mothers. That maternal marital status has the largest impact on the high school graduation odds of White youth suggests that the stigma associated with non-marital births remains greatest among the group where it is least often experienced.

Our final analysis examines whether marital status mitigates the negative consequences of teen or young adult birth. We run models including maternal age at first birth and maternal marital status at birth, as well as all background variables, and then interact age at birth by maternal marital status. Our interaction results then enable us to determine whether, for example, youth born to married teen parents fare better, with regards to educational attainment, than those who were born to teen unwed mothers. These results are presented in Table 4. We

find no evidence that youth born to either married teen mothers or married young adult mothers are any more likely to graduate high school than those born to unmarried mothers for the full sample. Neither the coefficient for single mother nor the interaction terms reach conventional levels of statistical significance. Looking at whether maternal age at birth and marital status interact differently for White, Black, and Hispanic youth also provides little evidence that being born to a married teen mother is any more advantageous to youth's educational attainment than if they were born to unmarried teen mothers. For white youth, the coefficient for maternal marital status at birth is significant, as are the measures of maternal age at birth, but neither interaction term is significant. For Black and Hispanic youth, neither the indicator of maternal marital status nor the interaction effects are significant.

Conclusion

Teen parenting has long been problematized in the United States, and over the past few decades the campaign to reduce teen births has been highly successful. The consensus that teen parenting is associated with a range of negative socioeconomic and wellbeing outcomes for the offspring is well documented. But far less attention has been devoted to ascertaining whether parenting in one's early twenties was that much better. In recent decades, as the proportion of births to teenagers has declined, an increasing proportion of first births are now occurring to women in their twenties. Nonetheless, young adulthood today has increasingly become a key time period for human capital accumulation. Children born to parents in their early twenties, then, may also face various disadvantages once perceived to be largely limited to those born to teenagers.

Consistent with the sizable body of earlier studies, we find that children born to teen mothers are considerably less likely to receive a high school diploma than those born to older mothers. Youth whose mothers were in their early twenties at their birth are considerably more likely to complete high school than their counterparts born to adolescent mothers. But those born to young adult mothers are also significantly less likely to obtain that valued diploma than women whose mothers deferred childbearing until age 25 or later. In other words, youth born to young adult mothers (those aged 20 to 24) are also relatively disadvantaged in the education market.

Our results also indicate that these differences are not due solely to the greater likelihood that adolescent mothers were unmarried at the birth of the child. Youth born to married teen mothers fare no better, in terms of obtaining that valued high school degree, than youth whose teen mothers were unmarried when they were born. Nor do we see any salient differences amongst youth whose mothers were in their early twenties at their birth. This finding may be interpreted in a positive light. As the proportion of births to teens declines, a growing share of first born children are born to women in their early twenties, the majority of whom are unmarried (though many are cohabiting). That children born to unmarried women in their twenties are no less likely, upon reaching adulthood, to graduate from high school as those born to mothers in their twenties who were married at their birth suggests that the stigma of non-marital birth may be declining as its prevalence increases. But children born to married mothers are still significantly more likely to complete high school. Additional research is necessary to determine if the population of mothers is growing increasingly bifurcated, with married mothers deferring childbearing until later (when they are 25 or older), while the bulk of births to women in their early twenties and younger are to single women. If that is the case, and older age at birth and marital status become synonymous, then the destinies of Americans from more and less advantaged backgrounds will truly have diverged.

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¹ Nearly all of the NLSY79 women have completed their fertility by 2008, but because we limit our sample to first-born children and these children have to age into the sample (having reached age 19), our sample is disproportionately comprised of children born to young mothers. This is particularly the case among the children born to unmarried women.

² The NLSY79 clearly identifies only three race/ethnic categories: Non-Hispanic Black, Hispanic, and a third group of non-Hispanic non-Black respondents. For brevity we refer to the latter group as “white” in results and to non-Hispanic Black respondents as “Black.”

Figure 1. Percent Completing High School by Age 20, by Maternal Age at Birth & Race

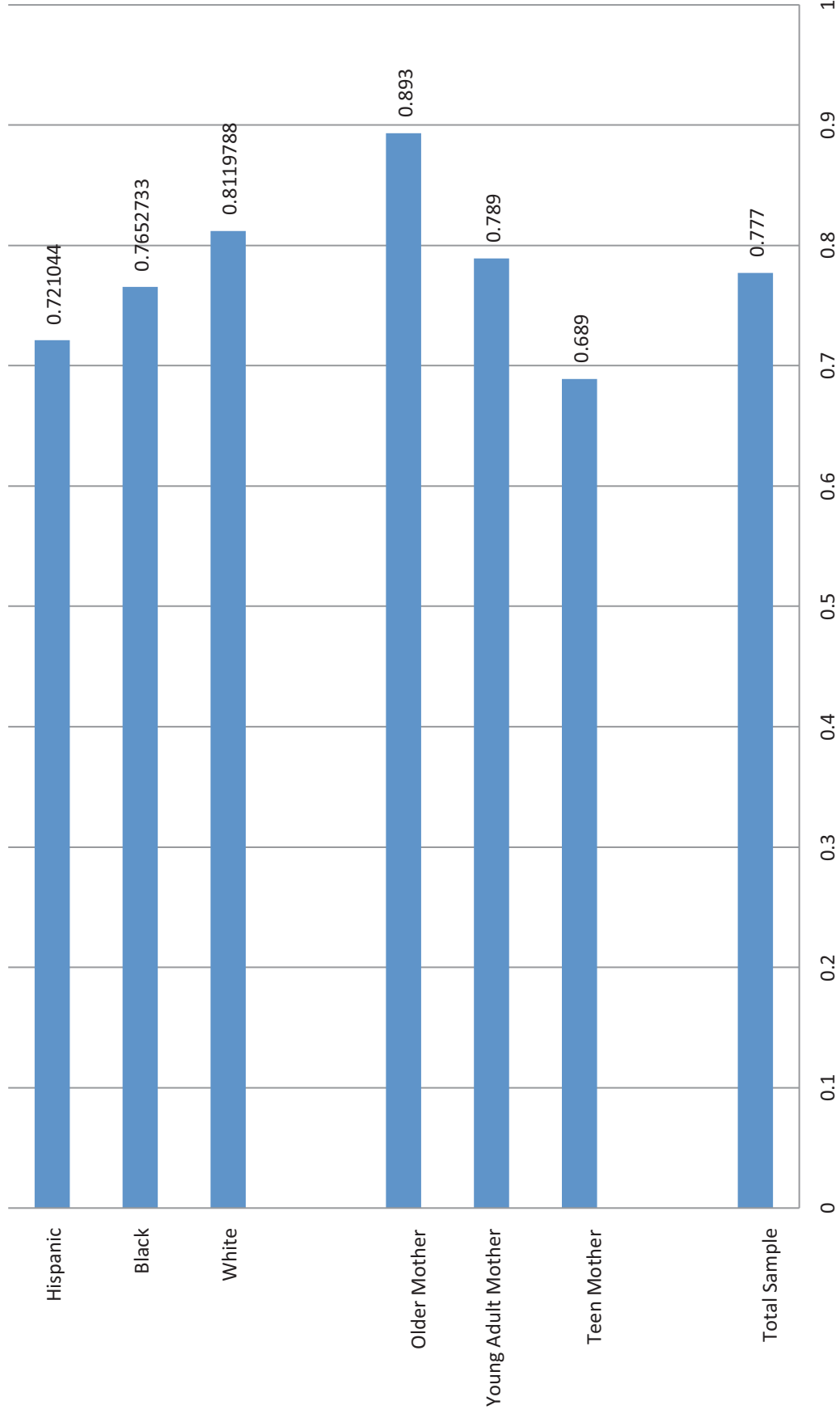


Figure 2. Percent Graduating from High School by Age 20, by Marital Status and Age of Mother at Birth

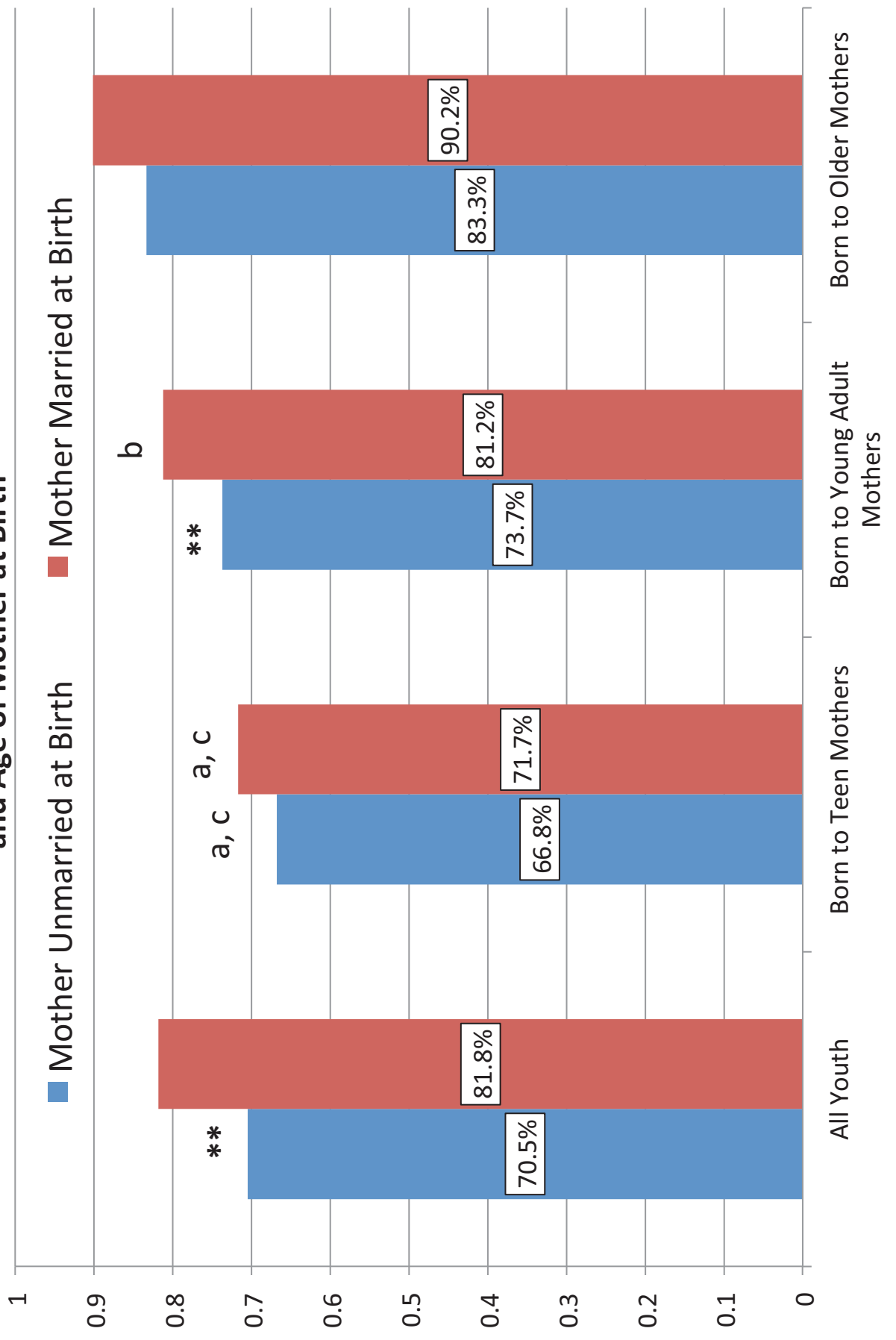


Table 2. High School Graduation by Age 20 Regressed on Maternal Age at First Birth and Covariates, Total Sample

VARIABLES	Model 1		Model 2		Model 3		Model 4	
	B/S.E.	OR	B/S.E.	OR	B/S.E.	OR	B/S.E.	OR
Age at 1st Birth (Ref = 25+)								
< 20	-1.328 [0.141]	*** 0.265	-0.993 [0.152]	*** 0.370	-0.897 [0.155]	*** 0.408	-0.961 [0.182]	*** 0.383
20-24	-0.806 [0.144]	*** ^a 0.447	-0.601 [0.149]	*** ^a 0.548	-0.564 [0.149]	*** ^a 0.569	-0.563 [0.170]	*** ^a 0.570
Born to unmarried mother (0 = married mother)	---	---	---	---	-0.375 [0.116]	*** 0.688	-0.492 [0.337]	0.611
Respondent's mother's cognitive ability (AFQT)			0.016 [0.003]	*** 1.016	0.015 [0.003]	*** 1.015	0.015 [0.003]	*** 1.015
Respondent lived with both parents at age 14			0.253 [0.099]	** 1.287	0.226 [0.100]	** 1.253	0.226 [0.100]	** 1.254
Black			0.439 [0.126]	*** 1.552	0.605 [0.137]	*** 1.832	0.602 [0.137]	*** 1.826
Hispanic			-0.046 [0.137]	0.955	-0.019 [0.138]	0.981	-0.016 [0.138]	0.985
R's mother was foreign-born (0 = native born)			0.413 [0.200]	** 1.511	0.378 [0.201]	* 1.460	0.376 [0.201]	* 1.456
R's grandmother completed HS			0.095 [0.112]	1.099	0.086 [0.113]	1.090	0.086 [0.113]	1.089
Respondent's mother born in the South			-0.062 [0.111]	0.940	-0.057 [0.111]	0.945	-0.057 [0.111]	0.945
Respondent female (0 = male)			0.555 [0.095]	*** 1.743	0.561 [0.095]	*** 1.752	0.560 [0.095]	*** 1.751
Respondent born low birth weight (0 ≥ 5.5 lbs)			-0.285 [0.164]	* 0.752	-0.265 [0.164]	0.767	-0.268 [0.164]	0.765
Born to unmarried mother X < 20 at birth								1.208
Born to unmarried mother X 20-24 at birth								1.059
Constant	8.356 [1.035]	***	2.33 [0.490]	***	2.505 [0.530]	***	2.565 [0.565]	***
Observations	2,865		2,865		2,865		2,865	

Note: *** p<0.01, ** p<0.05, * p<0.10

^a Significantly different from Maternal Age at First Birth < 20, p 0.05.

Table 3. High School Graduation by Age 20 Regressed on Maternal Age at First Birth and Covariates, by Race

VARIABLES	Black			White			Hispanic			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	
	B/S.E.	OR	B/S.E.	OR	B/S.E.	OR	B/S.E.	OR	B/S.E.	
Age at 1st Birth (Ref = 25+)										
< 20	-1.620 [0.345]	*** 0.198	-1.236 [0.367]	*** 0.290	-0.838 [0.208]	*** 0.433	-1.274 [0.308]	*** 0.280	-1.072 [0.324]	*** 0.342
20-24	-1.688 [0.356]	*** ^a 0.344	-0.939 [0.368]	*** ^a 0.391	-0.477 [0.194]	** ^a 0.621	-0.667 [0.311]	*** ^a 0.420	-0.667 [0.324]	** ^a 0.513
Born to unmarried mother (0 = married mother)										
			-0.191 [0.208]	0.826						
Respondent's mother's cognitive ability (AFQT)			0.025 [0.006]	*** 1.025	0.010 [0.003]	*** 1.010	0.009 [0.003]	*** 1.009	0.024 [0.006]	*** 1.025
Respondent lived with both parents at age 14			0.317 [0.167]	*	0.378 [0.160]	** 1.459	0.336 [0.161]	** 1.400	-0.048 [0.198]	0.953
R's mother was foreign-born (0 = native born)			0.566 [0.293]	1.292	0.886 [0.622]	2.425	0.813 [0.621]	2.255	0.428 [0.232]	* 1.534
R's grandmother completed HS			0.100 [0.193]	1.105	0.323 [0.193]	*	1.381	0.295 [0.161]	-0.455 [0.251]	* 0.634
Respondent's mother born in the South			0.030 [0.186]	1.031	-0.028 [0.186]		0.797	-0.205 [0.159]	-0.012 [0.212]	0.988
Respondent female (0 = male)			0.911 [0.168]	*** 2.487	0.365 [0.147]	** 1.440	0.385 [0.148]	** 1.440	0.419 [0.189]	** 1.520
Respondent born low birth weight (0 ≥ 5.5 lbs)			-0.597 [0.241]	** 0.550	-0.148 [0.241]	0.863	-0.150 [0.319]	0.860	0.130 [0.348]	1.138
Born to unmarried mother X < 20 at birth										
Born to unmarried mother X 20-24 at birth										
Constant	2.451 [0.330]	***	1.381 [0.418]	***	0.874 [0.277]	***	1.017 [0.285]	***	1.867 [0.277]	0.994 [0.398]
N	933		933		1319		1319		613	613

Note: standard errors in parentheses; *** p < 0.001, ** p < 0.01, * p < 0.05.

^a significantly different from Maternal Age at First Birth < 20, p < 0.05.