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POSITIVE EDUCATIONAL OUTCOMES AMONG SCHOOL-AGE MOTHERS

Jennifer Manlove
&
Carrie George

Presented at the Annual Meetings of the American Educational Research Association
New York City
April 8, 1996

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INTRODUCTION

Public concern surrounding the issue of teenage motherhood has recently accelerated, due to the unusually high teenage birth rate in the United States, combined with the negative life outcomes associated with having a teenage birth. The teenage birth rate, which declined in the U.S. during the 1960s and 1970s, has shown a sharp rise since the mid-1980s. Between 1986 and 1991, the teenage birth rate rose by 25 percent, from 50.2 to 62.1 births per thousand teens, after which it declined slightly to 59.6 per thousand in 1993 (Moore & Snyder, 1996). The U.S. teenage birthrate remains substantially higher than birthrates in comparable industrialized countries.

BACKGROUND

On average, teenage mothers have lower levels of educational attainment than other women; however, there has been some debate regarding causal linkages between educational attainment and fertility (Luker 1991). During the 1970s and early 1980s, a number of studies explored the relative influence of dropping out, educational attainment and the timing of motherhood. Most of this research showed a strong influence of educational attainment and aspirations on age at first birth, with a smaller causal effect of age at first birth on subsequent educational attainment (Hofferth & Moore 1979; Marini 1984; Rindfuss et al., 1980).[1] While this research was innovative, subsequent institutional changes in school-level policies, including the passage of Title IX in 1972[2] and programs targeted to at-risk teens, may have altered the association between school-age motherhood and educational outcomes (Upchurch and McCarthy 1989).

More recent studies of the relationship between teenage motherhood and educational

attainment use multiple methods to examine the educational consequences of age at first birth. These studies can be broken down into categories of a) sibling fertility models, which control for variation across families and yield mixed results about the effects of teenage parenthood on educational attainment (Geronimus & Korenman 1992; Hoffman, Foster & Furstenberg 1993); b) studies that control for the endogeneity of educational attainment and teenage motherhood and argue that there may be underlying opportunities that jointly influence decisions about education and fertility (Klepinger, Lundberg & Plotnick 1995; Moore et al., 1993; Olsen & Farkas 1989; Ribar 1993); and c) studies of the relative timing of first birth, dropout, and high school completion which yield mixed interpretations of the influence of having a teenage birth on dropping out of school or completing high school (Anderson 1993; Upchurch & McCarthy 1990). Most recent studies have found small effects of age at first birth on high school completion, after controlling for background factors. It appears that teenage mothers are more likely to drop out of school and have lower levels of educational attainment than women who postpone childbearing (Maynard 1995; Scott-Jones 1991).

While there has been substantial debate regarding the educational consequences of having a teenage birth in comparison to postponing childbearing past the teenage years, there has been limited research on positive educational outcomes within a sample of teenage mothers. One such study examined later life outcomes among a sample of African American teenage mothers from Baltimore. In this study, Furstenberg et al. (1987) found that teenage mothers who finished high school had reduced odds of economic dependence and large family size and greater odds of attaining economic security in later life.

Proposed Antecedents of Educational Outcomes Among School-Age Mothers

A study of factors associated with positive educational outcomes among teenage mothers can be informed by the large body of literature that examines antecedents of high school dropout and high school completion. Factors identified in the literature which are relevant to this study are outlined below.

Family Background and Family Supports. Family background characteristics, including higher levels of parental education and income, living in an intact family, and residing outside of the southern United States all have a demonstrated positive relationship with remaining in school (Ekstrom et al. 1986; Wehlage & Rutter 1986). In addition, Forste & Tienda (1992) found that teenage motherhood influences eventual educational outcomes to a lesser extent for African American teens than for whites or Hispanics. A status attainment perspective hypothesizes that family socioeconomic status (SES) influences educational outcomes through individual educational attainments and preferences. For example, higher SES families are generally more able to provide conducive learning environments than other parents and offer greater cultural and material resources to facilitate involvement in their teen's education (Clausen 1986; Lareau 1989).

School Characteristics. The type of school that a teen attends may contribute to her subsequent educational outcomes. High-income schools may have more resources, curricula oriented to higher achieving students, and students with higher levels of performance who are less likely to drop out than other schools (Lee & Bryk 1988; Mayer 1991). School-level factors may also mediate the influence of family background on educational outcomes among teenage mothers. For instance, Bryk & Thum (1989) found that at-risk youth especially benefit from

attending schools that emphasize academic involvement and have engaged teaching staff, while Brooks-Gunn, Guang, & Furstenberg (1993) found that black students attending racially diverse schools had a reduced risk of dropping out. Specific programs within schools, such as sex education classes targeted to preventing teenage pregnancy, may also influence educational outcomes among school-age mothers. Teen mothers who are discouraged in school may have fewer opportunity costs associated with dropping out of school. An extensive body of literature documents the inequitable influence of ability grouping and curricular tracking on educational outcomes, especially among disadvantaged students who have been over-represented in non-academic tracks (see Gamoran & Berends 1987; Slavin 1990 for reviews). Placement in a non-academic track is associated with losses to achievement and lowered aspirations, largely as the result of lower instructional quality (Oakes et al., 1992). Alternatively, positive educational labels may be associated with greater involvement in education and a lower likelihood of dropping out of school.

Educational Performance and Involvement. An opportunity cost approach to educational outcomes hypothesizes that teens who are performing well and engaged in school have greater opportunity costs associated with dropping out of school than other teens. Eckstrom et al. (1986) show that low academic achievement, indicated by low test scores and low grades, is associated with an increased risk of dropping out of school. In addition, students with no plans to attend postsecondary school are also more likely to drop out.

Characteristics at First Birth. The relative timing and sequencing of life events, such as getting married, dropping out of school, and having a first birth, may also influence educational outcomes among teen mothers. For example, Upchurch (1993) suggests that among a sample of

teenage mothers, those who dropped out prior to pregnancy were the most disadvantaged subgroup who were at risk for especially negative life outcomes. Upchurch & McCarthy (1990) also suggest that while teen mothers who remain enrolled in school are as likely to eventually graduate as women who do not have a teenage birth, that having a birth after dropping out reduces the likelihood of graduating.

DATA AND METHODS

This paper identifies characteristics associated with positive educational outcomes among a contemporary sample of teenage mothers. It employs an ecological framework to consider multiple aspects of the lives of teenage mothers. Hypothesized characteristics associated with positive educational outcomes are measured at the family-level, individual-level, and school-level. A life-course approach allows us to consider whether the relative timing and sequencing of life events (including dropping out of school and having a first birth) influence the risk of negative educational outcomes. We employ an opportunity cost hypothesis to test whether teenage mothers who are engaged in social institutions such as school, and who receive support from their families, are more likely than disengaged teenage mothers to have positive educational outcomes.

Data

The paper uses the National Education Longitudinal Study of 1988 (NELS:88). These data provide a rich source of longitudinal information on family background, family formation, educational attainments, marital status and age at first birth. NELS:88, collected by the National Center for Education Statistics (NCES), is a nationally representative sample of American

students who were enrolled in 8th grade in 1988, and were followed over time until the latest wave of the study was collected in 1994.

NELS:88 is a longitudinal study of approximately 25,000 U.S. youth that provides trend data about critical transitions experienced by young people as they progress through high school, complete school or drop out, and make the transition to adulthood (NCES 1994). The data set includes questions on the parenthood status of the 8th grade cohort over time and a follow-up of students who dropped out of school after the 8th grade interview. Data collection consisted of four phases, including: 1) a base year survey conducted in 1988, when the students were in 8th grade; 2) a first follow-up of in school students and dropouts in 1990, when students had reached tenth grade or the equivalent; 3) a second follow-up of in school students and dropouts in 1992, when the students were in twelfth grade or the equivalent; and 4) a third follow-up of individuals conducted in 1994, to capture information about family formation, post secondary education, and labor force participation. NELS:88 contains over samples of Hispanic and Asian/Pacific Islander students.

Unfortunately, because of the government furlough, data are not yet available for the third follow-up, so we only have data available for the equivalent of twelfth grade (four years after eighth grade). This paper addresses positive educational outcomes among a sample of 602 school-age mothers. Future revisions to the paper will include information from the third follow-up, which provides detailed educational histories (including high school completion, GED or other equivalency completion, and enrollment in further schooling after the equivalent of twelfth grade); occupational information; assessments of fertility outcomes (including the total number of children born during the teen years and their birth dates); and marital trajectories (including

date of first marriage, separations and/or divorces, and total number of marriages).

Measures

This paper explores the influence of 1) family background and family supports; 2) school characteristics; and 3) individual characteristics on outcomes among a sample of school-age mothers. We test whether family background factors measured in the eighth grade help explain the likelihood of being enrolled in school or in an alternative program in the equivalent of twelfth grade. Dummy variables for African American, Hispanic, and white[3] teens are included to control for race/ethnicity differences in outcomes among teenage mothers. Other family background variables include the age of the respondent's mother, parental socioeconomic status (including father's and mother's education level and occupation, and family income), family structure (whether the teen lived with two biological parents) and whether the teen attended a school in an urban area or in the South. Parental involvement (based on whether parents attend parent-teacher organization meetings, volunteer in school, or attend school meetings) and respondent's perception of her mother's aspirations for her educational attainment are also included.

School-level variables include current (for in-school students) or most recent (for dropouts) school program enrolled in, including academic track, vocational track or general track. In the eighth grade, attending sex education classes one or more times a week was measured. An index of school safety and crime was created from student reports about the degree to which the following are a problem in their schools: physical conflict among students, robbery or theft, vandalism of school property, student use of alcohol, student use of illegal drugs, student possession of weapons, physical abuse of teachers, and verbal abuse of teachers,

where response categories are "serious," "moderate," "minor" and "not at all." A high score indicates a low degree of problems and ranges from 0 to 24, with an alpha of 0.91. Also included is a school report of the percentage of students receiving free school lunches, as a proxy for school socioeconomic composition, and a dummy that flags students in schools with low minority populations (0-5 percent minority).

Individual characteristics measured in eighth grade include test scores, grades, and post-secondary educational aspirations. A dichotomous variable measures whether the teen was behind grade in eighth grade by flagging students who were age 15 or older. Another dichotomous variable identifies students for whom both of two sampled eighth grade teachers rated them as low ability. A final dummy variable indicates students who have changed schools four or more times between first and eighth grade (excluding changes due to promotion, e.g., into middle school or high school).

Measures taken from the time of the first birth include the teen's age at the birth of her first child, whether the teen dropped out prior to her first pregnancy, and whether the teen was married at the time of her first birth. In addition, marital status after first birth is measured. Another variable flags students who had a birth prior to the eighth grade.

Methods

This paper uses multinomial logit models to test the relative likelihood that teenage mothers have one of three outcomes: 1) stayed in high school; 2) had dropped out at some point and were enrolled in an alternative or GED program; or 3) had dropped out and were not enrolled in an educational program at the equivalent of twelfth grade. Multinomial logistic models are suitable when response variables consist of a discrete set of choices (in this case, three mutually

exclusive outcomes) which are not ordered (Agresti, 1990). The reference category in these analyses consists of teenage mothers who had dropped out of school and were not enrolled in an alternative program. All analyses use the NELS:88 panel weights.[4]

RESULTS

Descriptive Analysis

Table 1 presents descriptive information on teenage mothers by their status at the time of the equivalent of twelfth grade (currently enrolled teen mothers; teen mothers enrolled in an alternative or GED program; and dropouts). As a comparison category, characteristics of teens who did not have a school-age birth are reported in the fourth column. According to this table, almost half of the teenage mothers (49.4 percent) were dropouts at the time of the second follow-up, almost a fifth (19.1 percent) were alternative students enrolled in a GED or other program,[5] and less than a third (31.5 percent) were currently enrolled in school. Significance levels compare differences in means between dropouts and the other two categories of teenage mothers.

(Table 1 about here)

The first two rows of Table 1 report that the three categories of teenage mothers were not significantly different in age at first birth; however, in-school teenage mothers were younger in twelfth grade (18.2 years) than alternative student teen mothers (18.9 years) or dropout teen mothers (18.7 years). The racial/ethnic background of teenage mothers also appears to be related to outcomes. For instance, dropout teenage mothers were more likely to be Hispanic than alternative or in-school teen mothers, while in-school and alternative teen mothers were more likely to be African American. This reflects the higher likelihood that African American teen

mothers remain in school. In-school teen mothers were slightly less likely to be white than dropout teen mothers. Other family background factors associated with outcomes among teenage mothers include parity (with dropout teen mothers being significantly higher parity births themselves than the other two categories); family SES (dropout teen mothers having significantly lower SES than the other two categories); and living arrangements in eighth grade. Less than half of teen mothers who dropped out (39.0 percent) or became alternative students (38.4 percent) lived with both of their biological parents in eighth grade in comparison with about half (51.1 percent) of teen mothers who remained in school by the equivalent of twelfth. This is in comparison with 69 percent of the sample of teens who did not have a school-age birth.

Family-school variables are also associated with outcomes. In-school teen mothers had parents with higher levels of involvement than dropout teen mothers. Surprisingly, the lowest average level of parental involvement was among alternative student teen mothers (.36), which is significantly lower than parental involvement among dropout teen mothers. Finally, maternal aspirations for their daughter's education were significantly higher among alternative student teen mothers than drop out teen mothers.

School variables also appear to be related to outcomes among teen mothers. For example, in-school teen mothers were more likely than dropout teen mothers to be in an academic or vocational program and less likely to attend a general high school program (measured at the last time they attended school), while alternative student mothers were more likely than dropout teen mothers to attend a vocational program and less likely to attend a general program. On average, teen mothers who were in school at the equivalent of their senior year were more likely than dropout teen mothers to attend a school with few minority students.

School safety, attending a sex education class, and school resources (measured by the percent of students receiving free lunches in the eighth grade school) were not different for the different categories of teen mothers.

Individual educational performance and involvement measures were also associated with educational outcomes. In-school and alternative student teenage mothers had higher standardized test scores, grade point averages, and post-secondary education plans in the eighth grade than dropout teen mothers. In-school teen mothers were less likely to be rated as low ability by their eighth grade teachers. Dropping out of school is also associated with more turbulence than staying in school: 63.4 percent of dropout teen mothers were behind grade in eighth grade (age 15 or older) compared with 68.0 percent of alternative student teen mothers and 40.8 percent of in-school teen mothers. This is in comparison with only 28.1 percent of the sample of teens who didn't have a school-age birth. In-school teen mothers were also less likely than dropout teen mothers to change schools four or more times than dropout teen mothers.

The final two rows of Table 1 explore whether the relative *timing* of life events influenced outcomes among teenage mothers. Unfortunately, because of the survey design, only the GED students in the alternative student category were asked the date of their first dropout episode and the date of their first marriage. Alternative students in a degree granting program were not asked to respond to those questions. These data show that a similar percent of GED student teenage mothers (42.6 percent) and dropout teen mothers (42.4 percent) had dropped out prior to pregnancy. Also, the percentage of GED students who were married prior to having a first birth (19.3 percent) is not significantly different from the percent of dropout teen mothers who were married (24.1 percent).

Multinomial logit models

Table 2 presents the results of multinomial logit models. This table presents the transformed betas, e^{b_i}, representing relative risks. A coefficient that is greater than one represents a greater likelihood of being an in-school teen mother (column 1) or an alternative student teen mother (column 2), in comparison with being a dropout teen mother. A value less than one is associated with a reduced likelihood of being enrolled in high school or in an alternative program, among teen mothers.

(Table 2 about here)

The first row of Table 2 shows that teen mothers who were older at the time of their first birth are more likely to be alternative students than to drop out of school (note that this is significant at the .10 level only). Black teen mothers are more than two times as likely to be enrolled in high school and 58 percent more likely to attend an alternative or GED program than to be a dropout teen mother. Other family background characteristics show that residing with two biological parents in eighth grade is associated with a greater likelihood of being a currently enrolled teen mother, while attending a central city school or a school in the South is associated with a reduced likelihood of attending high school in comparison with dropping out of school, among teen mothers. Higher parity teen mothers are less likely to be currently enrolled in school than to drop out (note that this is significant at only the .10 level). Family-school variables significantly differentiate alternative student teen mothers from dropout teen mothers. Interestingly, higher levels of parental involvement are associated with a reduced likelihood of attending an alternative or GED program than dropping out of high school, among teen mothers. This section suggests that black teen mothers, teens who are older at first birth and teen mothers

who reside with two biological parents in the eighth grade are more likely to have positive educational outcomes, while living in the South or in a central city school is a risk factor associated with dropping out of school.

School-level factors are also associated with educational outcomes among teen mothers. Teen mothers who attended a vocational high school program (in their current or last school) are more likely to either attend high school or an alternative school program, in comparison with being a dropout teen mother in the equivalent of twelfth grade. Teen mothers who attended an academic program are more likely to be enrolled in high school than to drop out. Student lunches and minority composition of the eighth grade school are also related to outcomes among teen mothers. For example, teen mothers attending schools with few minority students (0-5 percent) in the eighth grade are more likely to be enrolled in an alternative or GED program than to drop out of school. Surprisingly, attending an eighth grade school with more disadvantaged students (with more students receiving free lunch) is associated with a greater likelihood of attending an alternative or GED program, among teen mothers. This may be due to stronger connections between schools with disadvantaged student populations and GED or other equivalency programs. This section shows that attending an academic or vocational program or attending a low-minority school provides a buffering effect for teenage mothers.

Individual performance measures are also associated with high school program attendance among teen mothers. Teen mothers rated as low ability by both eighth-grade teachers are less likely to currently attend high school than to drop out of high school. In addition, higher eighth grade standardized test scores are associated with a greater likelihood of attending high school (significant at only the .10 level) or an alternative or GED program for teen mothers in

comparison with dropping out of school. Higher grades are associated with an increased likelihood of being an in-school teen mother than being a dropout teen mother. Teen mothers who were behind grade in eighth grade or who had changed schools four or more times between first and eighth grades were also less likely to currently attend high school in comparison with dropping out, suggesting that educational turbulence or being held back is associated with negative educational outcomes among teenage mothers.

These tables show that family background, school-level and individual-level characteristics among school-age mothers are all associated with the type of educational programs they attend in the equivalent of twelfth grade.

Status at the equivalent of twelfth grade

Table 3 presents descriptive statistics on the characteristics of school-age mothers at the time of the second follow-up (when they were in the equivalent of twelfth grade). This table suggests some other differences between dropout teen mothers and alternative/GED students or high school students. For example, teen mothers enrolled in school are less likely than dropout teen mothers to be currently married or divorced. More than a third of dropout teen mothers (35.5 percent) were married at senior year, compared to 23.6 percent of alternative student teen mothers and 11.3 percent of in-school teen mothers. Among teens who did not have a school-age birth, only 2.1 percent were married. A similar percentage of teen mothers in each educational outcome group, however, were cohabiting at the equivalent of twelfth grade. In-school teen mothers are much more likely (71.2 percent) to be living with one of their parents or stepparents in twelfth grade than either alternative student teen mothers (53.2 percent) or dropout teen mothers (51.0 percent), suggesting that parental supports are associated with staying in school.

Finally both in-school teen mothers and alternative student teen mothers are less likely than dropout teen mothers to have their family go on welfare in the two years prior to twelfth grade. While this table does not provide information on the relative timing of school enrollment and family formation, it appears that being married and going on welfare are associated with dropping out of school, while living with a parent or stepparent is associated with remaining in school.

(Table 3 about here)

DISCUSSION

Although we do not yet have complete data to follow a current sample of school-age mothers to high school graduation, these models suggest some buffering factors associated with positive educational outcomes among school-age mothers (staying in school or in an alternative or GED program). The data indicate that almost half of the teen mothers (49.4 percent) had dropped out by the equivalent of twelfth grade, and that these students were an especially disadvantaged sample of school-age mothers. The analyses point to the importance of family background, school environment, and individual characteristics for positive educational outcomes.

The main family background characteristics that came through in the models include race/ethnicity (African-American teen mothers are more likely to be enrolled in high school or in an alternative program than whites), family structure (living with two biological parents in eighth grade is associated with a greater likelihood of staying in school), and location (teen mothers in central city schools or in the South in eighth grade are less likely to be currently enrolled than to drop out of school). Family involvement in school is associated with participation in an

alternative or GED program. School program characteristics of school-age mothers indicate that attending a vocational or academic high school program is associated with positive educational outcomes. Attending a low-minority school or a school with more disadvantaged students (with more students receiving free lunch) in the eighth grade is also associated with attending an alternative or GED program.

Individual performance and ratings are also predictive of attending high school or an alternative program, with higher ratings, test scores and grades from the eighth grade associated with enrollment in high school or in an alternative program in the equivalent of twelfth grade among teen mothers. Being behind grade or having a turbulent educational career (changing schools four or more times) are risk factors associated with a greater likelihood of being a dropout teen mother instead of an enrolled teen mother.

Information collected from the time of the second follow-up (at senior year), suggests that there are other buffering mechanisms associated with positive educational outcomes. For example, teenage mothers who remained in school were more likely to be living with a parent or stepparent and less likely to be currently married than dropout teen mothers. Welfare dependence may also be predictive of educational outcomes, but the current data do not allow for a test of causality.

Further data will allow us to more fully explore the relationship between teenage motherhood and educational outcomes. Our dependent variable measures enrollment status at the equivalent of twelfth grade. Future analyses will predict factors associated with teen mothers who subsequently either graduate from high school or receive a GED or other equivalency.

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ENDNOTES

1. For instance, in a fifteen-year follow-up of a 1950s cohort of high school students, Marini (1984) found that educational attainment had a significant delaying effect on the timing of motherhood, with a smaller, significant effect of age at first birth on eventual educational attainment. Rindfuss et al. (1980) analyzed retrospective data on a 1970 sample of 34- to 44-year-old women and also found that the dominant effect was from education to fertility. With a 7-year follow-up sample of females age 14-24 in 1968, Hofferth and Moore (1979) found that the effects of schooling on age at first birth were significant only among women who had a birth at age 19 or older, and age at first birth influenced educational attainments primarily among girls under age 18.

2. Title IX outlawed discrimination on the basis of pregnancy and parenthood in publicly funded schools.

3. Because of the small sample sizes of Asian and American Indian teens, these groups were merged into the white reference category.

4. Sample weights were adjusted to reflect the size of the sample (602). Weights of greater than 5 or less than .20 were adjusted to 5 and .20 respectively to avoid over-sampling or under-sampling individual cases.

5. Alternative students were either in a GED or other equivalency program or in a degree granting program.

TABLE 1: MEANS FOR FAMILY, SCHOOL, AND INDIVIDUAL CHARACTERISTICS BY SENIOR YEAR STATUS

	In School Teen Mothers	Alternative Student Teen Mothers	Drop Out Teen Mothers	No Births
Age at First Birth (13.0-19.9)	17.1	17.3	17.2	--
Age at 12th Grade (12.3-21.8)	18.2 ***	18.9	18.7	18.0
FAMILY BACKGROUND				
Race/Ethnicity				
Percent Hispanic	14.2 *	9.5 ***	23.8	10.1
Percent Black	36.4 ***	32.3 *	19.3	11.3
Percent White	44.9 +	56.6	53.1	78.6
Mother's Age at Birth				
Mother's Birth Cohort (0-7)	3.8 +	3.3	3.4	3.7
Parity (1-7)	2.6 **	2.7 *	3.1	2.2
Family Structure, SES				
Family SES (-2.80, 2.54)	-.60 *	-.56 *	-.74	-.01
Percent Two Biological Parents	51.1 *	38.4	39.0	69.0
Location				
Percent Central City	24.2	29.4	27.6	26.2
Percent South	41.7 *	51.6	53.3	34.3
FAMILY-SCHOOL				
Parental Involvement (0-4)	.79 *	.36 **	.61	1.14
Mother's Aspirations (1-6)	4.40	4.59 *	4.29	4.88
SCHOOL				
School Type				
Percent Attend Sex Ed 1+ times/week	18.4	15.1	16.6	16.0
School Safety, Student Report (0-24)	16.7	17.3	16.2	16.5
School Program				
Percent Academic	16.3 ***	5.9	4.6	42.6
Percent Vocational	22.9 ***	17.7 *	7.2	11.6
Percent General	45.2 ***	44.7 ***	67.8	37.0
Percent Students Receiving Free Lunch	34.4	37.2	36.2	23.3
Percent 0-5% Minority Students	25.0 *	24.6	17.1	38.4
TEACHER RATINGS				
Percent Rated Low Ability by Two Teachers	10.4 ***	29.1	25.1	7.0
INDIVIDUAL				
School Involvement				
Standardized Test Score (31.0-75.8)	44.4 ***	44.3 **	42.1	51.6
Grade Point Average (0.5-4.0)	2.6 ***	2.5 +	2.3	3.0
Post-Sec. Education Plans (1-6)	3.8 *	3.8 +	3.5	4.7
Percent Behind Grade	40.8 ***	68.0	63.4	28.1
Percent Changed Schools 4+ Times	11.5 **	20.9	22.1	9.3
Dropout/Marital Status				
Percent Dropped Out Before Pregnancy	--	42.6[a]	42.4	--
Percent Married Before First Birth	--	19.3[a]	24.1	--
Sample Size	224	97	281	7747
Percent of Weighted Sample Size	31.5	19.1	49.4	--

+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$

Note: significance levels are derived from independent samples T-tests comparing the main group of interest, Dropout Teen Mothers, to the groups Alternative Student and In School Teen Mothers. Teens with no births are included for reference only.

[a] Percentages are based only on GED student teen mother responses, rather than all alternative student teen mothers.

TABLE 2: MULTINOMIAL LOGIT MODELS COMPARING TEEN MOTHERS IN HIGH SCHOOL OR AN ALTERNATIVE/GED PROGRAM WITH DROPOUT TEEN MOTHERS, BY SENIOR YEAR

	High School Teen Mother	Alternative/ GED Teen Mother
Age at First Birth	1.00	1.02 +
FAMILY BACKGROUND		
Race/Ethnicity		
Hispanic	1.07	0.91
Black	2.05 ***	1.58 *
(White/Asian/Am. Indian)	1.00	1.00
Mother's Age at Birth		
Mother's Birth Cohort	1.04	1.02
Parity	0.87 +	0.91
Family Structure, SES		
Family SES	0.95	1.29
Two Biological Parents	1.32 *	1.01
Location		
Central City	0.72 *	1.04
South	0.68 **	1.00
FAMILY-SCHOOL		
Parental Involvement	1.08	0.54 **
Mother's Aspirations	1.10	1.19
SCHOOL		
School Type		
Attend Sex Ed 1+ times a week	0.88	0.88
School Safety - Student Report	1.01	1.02
School Program		
Academic	1.72 *	1.27
Vocational	2.26 ***	1.80 **
General	1.00	1.00
% Students Receiving Free Lunch	1.00	1.01 *
0-5 % Minority Students	1.27	1.47 *
TEACHER RATINGS		
2 Teachers Rated Student as Low Ability	0.63 **	1.28

TABLE 2 (continued)

	High School Teen Mother	Alternative/ GED Teen Mother
INDIVIDUAL		
School Involvement		
Standardized Test Score	1.04 +	1.06 *
Grades	1.46 *	1.29
Post-Sec. Education Plans	0.98	0.99
Behind Grade (age 15 or older in 8th grade)	0.67 **	1.06
Changed Schools 4+ times	0.71 *	0.87
Chi-Square	293.27	
d.f.	56	

+ p<.10 * p<.05 **p<.01 ***p<.001

TABLE 3: MEANS FOR STATUS AT SECOND FOLLOW-UP BY SENIOR YEAR STATUS

	In School Teen Mothers	Alternative Student Teen Mothers	Drop Out Teen Mothers	No Births
Marital Status				
Percent Currently Married	11.3 ***	23.6	35.5	2.1
Percent Currently Divorced	1.2 **	5.9	5.8	0.1
Percent Currently Living with a Partner. Unmarried	11.6	11.3	12.1	2.1
Living Situation				
Percent Living With A Parent	71.2 ***	53.2	51.0	80.2
Welfare Status				
Percent Family on Welfare in Past 2 Years	12.1 **	14.4 *	23.7	4.6
Sample Size	224	97	281	7747
Percent of Weighted Sample Size	31.5	19.1	49.4	--

+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$

Note: significance levels are derived from independent samples T-tests comparing the main group of interest, Dropout Teen Mothers, to the groups Alternative Student and In School Teen Mothers. Teens with no births are included for reference only. Cells marked "--" contain no information because either the category is inappropriate for the group or the group was not asked the necessary questions.