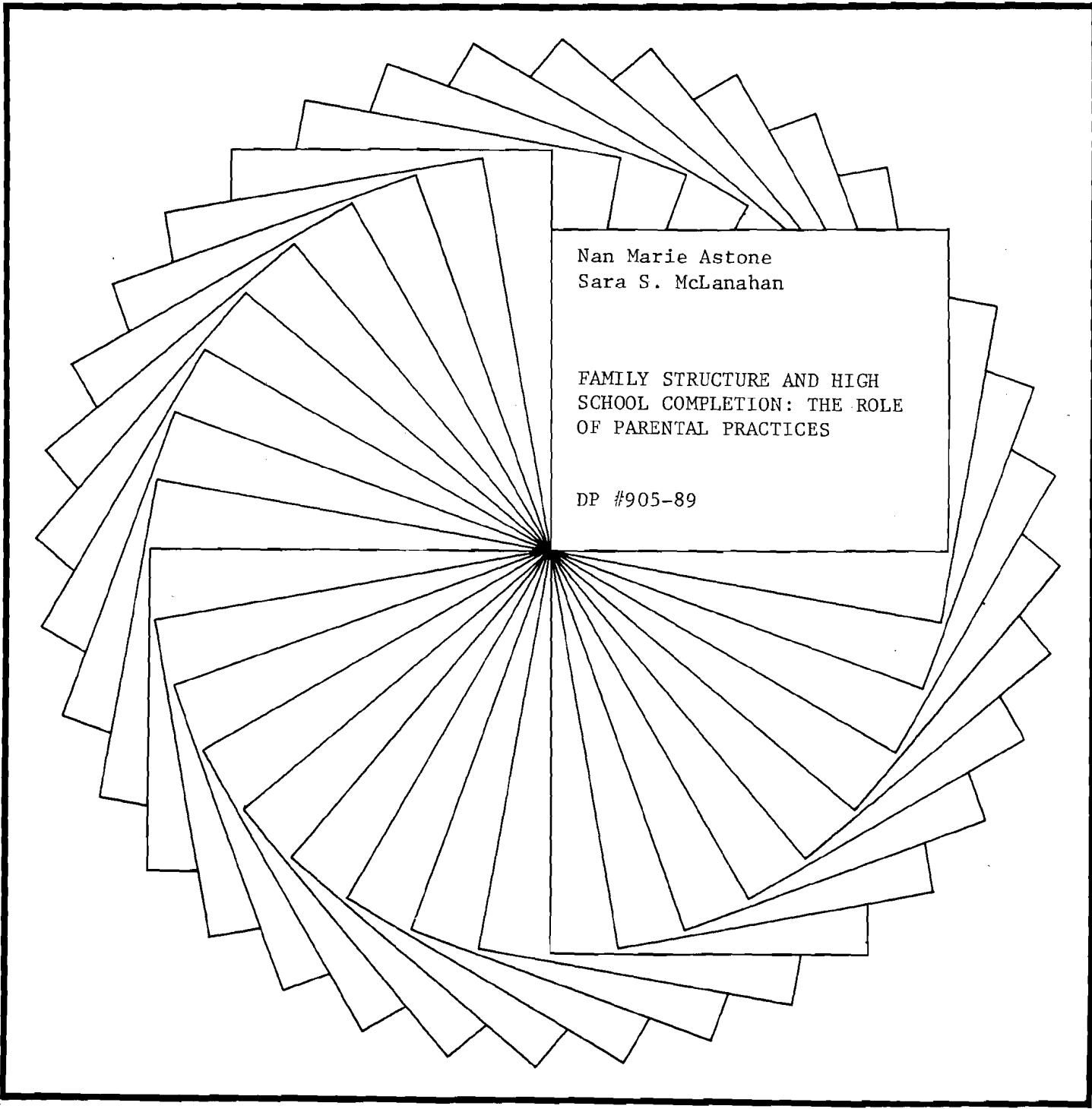

IRP Discussion Papers



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FAMILY STRUCTURE AND HIGH
SCHOOL COMPLETION: THE ROLE
OF PARENTAL PRACTICES

DP #905-89

Institute for Research on Poverty
Discussion Paper no. 905-89

**Family Structure and High School Completion:
The Role of Parental Practices**

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December 1989

An earlier draft of this paper was presented to the 1989 meetings of the Population Association of America in Baltimore, Maryland. We are grateful to Andrew J. Cherlin, Kristin Moore, Gary Sandefur and Elizabeth Thomson for their valuable comments. We thank Thomas Hanson for his computational assistance. Support was provided by the National Institute on Aging under grant A600129-02 and by the National Institute for Child Health and Human Development under grant HD 19375-03. Computer facilities were provided by the Wisconsin Center for Demography and Ecology under grant HD 05876. Any opinions expressed in this paper are those of the authors alone and not of the sponsoring institutions.

Abstract

This paper attempts to integrate ideas from the field of child development with sociological models of educational attainment. It examines the relationship between family structure--children who live with both natural parents versus those whose parents live apart--and children's attitude toward, and achievement in, high school. Using the High School and Beyond Sophomore Cohort, 1986, we explore educational differences among the offspring that might be attributed to parental expectations and practices regarding their children's schooling. We conclude that children who live with single parents or stepparents receive less parental encouragement and attention concerning educational activities than do children who live with both natural parents, and that school-related parenting practices affect children's alienation from school during the high school years. We also find that living in a stepparent family has almost the same negative consequences on the educational attainment process as does living in a single-parent family.

Family Structure and High School Completion: The Role of Parental Practices

INTRODUCTION

Studies have shown that children growing up in single-parent or stepparent families are less likely to complete high school and less likely to attend college than children growing up with both parents (Coleman, 1988; Corcoran et al., 1987; Krein and Beller, 1986; McLanahan, 1985; McLanahan, Astone, and Marks, 1988). This relationship has aroused considerable concern among scholars and policymakers, especially in light of recent projections that half of all children born in the last decade will spend some time living in a single-parent family before reaching age 18 (Bumpass, 1984). Education is a key factor in determining long-term economic success, and the association between family disruption and lower educational attainment raises the question of whether the sharp increase in family instability during the past two decades will have lasting negative consequences for the next generation.

One reason why children from single-parent families are less likely to finish high school is the precarious economic position of these families. Mother-only families are more likely than other families to be poor (Garfinkel and McLanahan, 1986), and their poverty is more extreme than that of other groups (Bane and Ellwood, 1983). Even among single-parent families living above the poverty line, income insecurity is commonplace (Duncan and Hoffman, 1985). Investigations of the intergenerational effects of family disruption indicate that income differences account for between 30 and 50 percent of the difference in high school graduation among children from intact and nonintact families

(McLanahan, 1985; McLanahan and Bumpass, 1988; McLanahan, Astone, and Marks, 1988; Sandefur, McLanahan, and Wojtkiewicz, 1989).¹

Given that economic disparities do not account for all of the difference in children's achievement, sociologists have become increasingly interested in other factors related to family structure and achievement. They have begun to ask how child-rearing practices and parent-child relationships are affected by family disruption and single parenthood and how these may affect the long-term well-being of children. Of course, psychologists have been asking these question for years, and their work contains a number of intriguing hypotheses (Chase-Lansdale, Lindsay, and Hetherington, forthcoming; Hetherington and Arasteh, 1988). Of particular interest is the notion that children from disrupted families are subject to less consistent parenting styles and less social control than children living with both parents (Hetherington, Cox, and Cox, 1978; Wallerstein and Kelly, 1979; Steinberg, 1987; Dornbusch et al., 1985). While these ideas are extremely suggestive, for the most part they have not been tested using data from randomly selected, nationally representative samples.²

This paper represents a first step toward integrating ideas from the literature on child development with sociological models of educational attainment. We are especially concerned with the relationship between family structure and children's school achievement during the high school years. Three specific questions are addressed: (1) Are children who live with single parents and stepparents exposed to different parental expectations and parenting styles than children

living with both natural parents? (2) Are parenting practices related to children's school behavior and achievement? (3) Can differences in parenting account for any of the negative association between family structure and children's school achievement?

The analyses described below break new ground in several ways. First, we focus on the process leading up to high school graduation and investigate a number of educational outcomes prior to high school completion. This is important insofar as it allows us to obtain a better understanding of the mechanism(s) through which family structure leads to educational failure. Such knowledge may prove more useful to policymakers concerned with reducing the rate of dropping out of school than information on dropout rates alone. Identifying a set of risk factors for dropping out of school (low aspirations, poor grades, truancy, negative attitudes toward school) and their systematic association with an easily ascertained background factor, such as family structure, should enable program administrators to focus more directly on high-risk groups.

Second, we distinguish between children living with single parents and those living with stepparents during their adolescent years. This allows us to isolate the effect of living with only one adult from the effect of living apart from natural parents. If the number of adults in the household is the critical factor in determining children's school success, then the consequences of growing up in a stepparent family should be less severe than those associated with growing up with a single parent. Alternatively, if the quality of the parent-child

relationship is the major factor, growing up in single-parent or stepparent family may have equivalent consequences.

Third, we examine the effect of **changes** in parents' marital status on **changes** in parenting practices and children's school behavior. While this type of model does not exclude the possibility that some unobserved characteristic of the parent(s) is causing both family disruption and children's poor school performance, it removes some of the bias that results from measuring family structure and parenting behavior at the same point in time. If family disruption is associated with a **change** in parental supervision or expectations, we can reject the argument that observed differences in parental behavior across different family types are due entirely to differences that predate family disruption.

BACKGROUND

School Failure

High school dropout is less an **event** than the accumulation of a **process** of failure in school, which begins earlier than the day a student officially drops out of school. According to this view, some students begin to disengage from school at a relatively early age. When this disengagement rises to a certain level during the high school years, the student leaves school. It is therefore of interest to see if factors that have established associations with dropping out of high school, such as growing up in a nonintact family, are also associated with early signs of disengagement from school.

Low educational aspirations can be taken as one indicator of early disengagement from school, since high aspirations are a critical factor in predicting educational achievement (Sewell and Shah, 1968; Sewell and Hauser, 1975). Low grade-point average is another important indicator of early failure and disengagement. Some analysts argue that in making important educational decisions, students take into consideration the "punishment-reward ratio" during their past years in school (Bidwell and Friedkin, 1988). In other words, they look back on their past experiences and consider how relatively rewarding those experiences have been. Since high grades are the primary reward distributed to students, they are undoubtedly a major component of the punishment-reward ratio.

In addition to measures of school aspirations and achievement, we are also interested in the behavioral and affective dimensions of what we are calling disengagement from school. A good indicator of behavioral disengagement is the student's attendance record. Truancy is perhaps the most obvious manifestation of early disengagement--the student refuses to go to school. Also, students' attitudes towards working hard in school and wanting to go to college measure the affective aspect of disengagement.

Parental Practices and Schooling

How important is it for parents to provide encouragement and supervision to their children in the areas of homework and school activities? In the United States, the process of educational attainment is managed by the coordination of decisions within a number of different

dimensions. These dimensions include curriculum placement, curriculum choice, participation in extracurricular activities, and postsecondary school choice. Successful navigation of this complicated system is partly dependent on parental assistance (Baker and Stevenson, 1986). Ineffective or inadequate parental assistance might lead a child to feel overwhelmed and a consequent disengagement from school.

Status attainment research indicates that high educational aspirations of parents are associated with high aspirations in children, and this association accounts for a significant part of the association between father's and son's educational attainment (Sewell and Shah, 1968). More recently, ethnographers have been concerned with the children who manage, against odds, to break the intergenerational cycle of poverty. Their evidence indicates that success in school among poor children of all family types is related to deliberate efforts on the part of parents to inculcate discipline and good study habits in their children (Clark, 1983; Williams and Kornblum, 1985). These important ethnographic findings await confirmation by tests based on data from random, representative samples.

If school failure is partly the result of inadequate or ineffective parenting styles and if parental practices vary by family type, this may explain part of the lower educational attainment of children from nonintact families. But why would we expect parenting practices to differ by family type? One possible reason is that parents in single- and stepparent families adhere to a different set of values and expectations than do parents in two-parent families. We know that there

is systematic variation in parental values and orientations among different religious, educational, and occupational groups (Alwin, 1984). If these characteristics of a parent's sociodemographic environment affect his or her values, it is plausible to hypothesize that other such characteristics, including family structure, may have an effect as well.

Another possibility is that single parents and stepparents are less successful than other parents in transmitting their values to their children. Successful navigation of the schooling process requires not only that parents hold high educational aspirations, but also that they develop and maintain stable relationships with their children. If children do not feel close to their parents or respect their parents, parental influence is seriously undermined. On this point, numerous studies have demonstrated that children from single- and stepparent families spend less time with their natural fathers than children who live with both parents. Less than 20 percent of nonresidential fathers see their children as often as one day per week (Furstenberg et al., 1983). Other studies suggest that the mother-child relationship may also vary by family type. Single mothers work longer hours outside the home than married mothers, which means that they have less time to spend with their children (Douthitt, 1989). In addition, several studies have shown that single mothers make confidants of their children, which may inadvertently encourage the premature assumption of such adult roles as worker or parent (Devall, 1986; Weiss, 1979). Others note that the authority structure is weaker in single-parent families, which reduces parents' ability to exercise control over their children (Nock, 1988).

Differential child-rearing practices in single-parent as compared to two-parent families may reflect only the limits on time and energy that a single adult in a household has for the children of that household. Acquiring evidence that these limitations of single parents affect their children is important, to be sure. Documenting differences between stepparent and two-parent families has additional implications, however. Presumably, the amount of money and time potentially available to children in stepparent families more nearly approximates that of two-parent than that of single-parent families. Therefore, significant differences between stepparent and two-parent families in patterns of parental behavior would indicate that the quality of parent-child relationships is different in stepfamilies. This could occur either because the stepparent is less willing to invest his or her time and money in the child, or it could occur because the child rejects the stepparent. In families where the children have been raised by a single mother for some time, the stepfather may be viewed as an intruder or competitor for the mother's time.

DATA AND METHODS

Data

The analysis uses data from the High School and Beyond Study (HSB). Respondents to this study were randomly selected members of either the sophomore or senior class at one of a nationally representative sample of over 1000 American high schools in 1980. Over 58,000 students took

part in the initial wave of data collection. A subsample of these respondents were surveyed again in 1982, 1984, and 1986. For the present analysis, we use data on respondents who were sophomores in 1980, who participated in all waves of data collection, and who are either white (not Hispanic), black, Mexican, or Puerto Rican.³

Variables

Table 1 contains descriptions of all the variables used in the analysis. Table 2 contains means and standard deviations for some of these variables and frequency distributions for the rest.

Dependent Variables. In the analyses that follow, we are concerned with six outcomes, all of which measure some dimension of success in secondary school. The first outcome variable is the **educational aspirations** of the respondent. This variable indicates whether or not the respondent expects to be a college graduate.⁴ The second educational outcome is a variable measuring the respondent's **grades**, i.e., whether she or he maintained at least a C+ or B- average in school. In the majority of the analyses this variable records information from the student's transcript, rather than a self-report.⁵ A third outcome is a scale measuring **attendance**. This scale was constructed from two questionnaire items which asked the respondent to report how many times during the last sixty days she or he had been late to school or absent without being sick. Our fourth outcome is an indicator of the student's **attitude toward schooling**. A respondent's score on this variable is coded 1 if he/she answers "true" to either of

Table 1

Definitions of All Variables Used in the Analysis:
High School and Beyond, 1986

DEPENDENT VARIABLES: EDUCATIONAL OUTCOMES	
Wants College	1 = respondent expects at least college degree; 0 = lower
Grades	1 = High School Transcript indicates GPA of at least B-/C+; 0 = lower
Attendance	Scale from 0 to 12; 0 = absent (without illness) or late most days in the last 60; 12 = perfect attendance in last 60 days.
Attitude	1 = respondent reports that she/he likes working hard in school, or will be disappointed if not a college graduate or both; 0 = neither
Ever Dropped Out	1 = never dropped out of HS; 0 = dropped out
High School Completion by 1986	1 = HS diploma or GED by 1986; 0 = no degree
INDEPENDENT VARIABLES: PARENTAL SOCIALIZATION	
Parental Aspirations	1 = respondent perceives that parent wants him or her to be a college graduate or higher; 0 = lower
Mother Monitors	1 = mother monitors school progress; 0 = mother does not monitor
Father Monitors	1 = father monitors school progress; 0 = father does not monitor
Supervision	1 = parents always know where respondent is; 0 = otherwise
Talks	1 = respondent spends time talking to parents at least weekly; 0 = respondent spends less time talking to parents

Table 1, continued

OTHER INDEPENDENT VARIABLES	
Family Structure	1 = lived with both parents; 2 = lived with one parent only; 3 = lived with one parent and a stepparent; 4 = lived with neither parent; all as of 1980
Change in Family Structure	1 = lived with both parents in 1980 and with either one parent only or one parent and a stepparent in 1982; 0 = lived with both parents in 1980 and in 1982
CONTROL VARIABLES	
SES Quartile ^a	1 = highest; 4 = lowest
Region	1 = Northeast; 2 = Northcentral; 3 = South; 4 = West
Residence	1 = suburban; 2 = urban; 3 = rural
Race	1 = white; 2 = black; 3 = Mexican or Puerto Rican
Sex	1 = male; 2 = female
School Dropout Rate	Self-explanatory
Number of Siblings	Self-explanatory
Test Scores	Self-explanatory

^aSocioeconomic status includes information on parental education, father's occupation, family income, and household possessions.

Table 2

Descriptive Statistics on Variables in the Analysis:
High School and Beyond, 1986

	Mean	Standard Deviation	N
<u>a. Means and Standard Deviations</u>			
Parental Aspirations	0.50	0.50	9,749
Mother Monitors	0.89	0.31	9,993
Father Monitors	0.76	0.42	9,180
Supervision	0.83	0.38	10,001
Talks	0.41	0.49	10,088
Wants College	0.44	0.50	10,076
High School Grades	0.67	0.47	10,428
Attendance Scale	9.70	2.18	10,350
Attitude	0.79	0.41	9,611
Ever Dropped Out	0.83	0.38	10,434
High School Completion by 1986	0.91	0.28	10,437
School Dropout Rate	8.40	9.09	10,036
Number of Siblings	3.00	1.77	9,315
SES Quartile	2.15	1.13	10,003

Table 2, continued

b. Frequency Distributions

Race	
White	72.6%
Black	16.0
Mexican or Puerto Rican	11.4
N	10,438
Female	
	52.7%
N	10,438
Region	
Northeast	23.4%
Northcentral	29.4
South	31.1
West	16.1
N	10,438
Residence	
Suburban	50.3%
Urban	22.0
Rural	27.7
N	10,438
Family Structure	
Both parents	68.0%
Single parent	17.8
Stepparent	10.0
Other	3.8
N	10,390
Change in Family Structure between 1980 and 1982	
	4.8%
N	7,099

the following questions: (1) "I like working hard in school," and (2) "I will be disappointed if I don't graduate from college."⁶ We interpret a high score on this variable as indicating someone who has positive feelings about school and educational attainment in general. A variable indicating whether or not the student ever dropped out of school, regardless of her or his educational attainment at the time of the last contact in 1986, is the fifth outcome we examine. This variable is important, since even if a respondent who drops out eventually completes a GED program or goes back to high school, her or his life course is disordered by early school leaving, and disorder in the life course entails penalties (Hogan, 1980). Our final outcome is high school completion or GED by 1986. By the last wave of the survey, the respondents were about 21 or 22 years of age. A young person who has reached that age without acquiring at least a high school equivalency degree is indeed disadvantaged.

Independent Variables. Our measure of family structure distinguishes between four types of arrangements: respondent lives with (1) both natural parents, (2) one natural parent only, (3) one natural parent and a stepparent, or (4) neither parent.⁷

Five indicators comprise our measures of school-related parenting practices. We make no claim that these measures are exhaustive or ideal. We do believe, however, that they tap some of the multidimensional concept of parenting style as it pertains to children's school performance.⁸ The first parenting variable indicates parental

college aspirations, that is, student's perceptions of whether or not her (his) mother wants her (him) to attend college.⁹

The degree to which either the mother or father monitor the student's progress in school constitutes the second and third parental behavior measures. These variables are indicators of the extent to which parents are engaged in the time-consuming, day-to-day supervision of schoolwork. One hypothesis is that children from single-parent families do less well in school because their parents have less time to spend with their children. These measures permit a preliminary evaluation of this hypothesis. A more global measure of parent supervision is the fourth indicator of parenting style. Lack of adequate supervision is associated with early family formation among black adolescent girls (Hogan and Kitagawa, 1985). It is highly likely that this lack has effects on other adolescent outcomes and other racial/ethnic/sex groups as well.

Finally, we include a measure of how often the parent and child spend time talking to each other. We are particularly interested in how this variable is associated with the outcomes, since there are competing hypotheses about the direction of effects. One could argue, for example, that close communication between a parent and child increases the parent's ability to influence the child positively. Conversely, one might expect a close, non-hierarchical relationship to undermine parental control. This is a particular danger when a parent, experiencing excessive stress as a result of divorce or loneliness, actually becomes dependent on a child.

Control Variables. Traditionally, parental education and father's occupation are included in models of educational attainment as measures of parental human capital. It is also customary to control for family income as a measure of parental financial capital. Unfortunately, HSB has a rather poor measure of family income (30% of the cases have missing data). Rather than rely on this faulty measure, we use a composite variable to measure family socioeconomic status, based on parental education, father's occupation, family income, and household possessions.

Other control variables used in the analysis are race (black, white, Mexican/Puerto Rican), sex, region of the country (Northeast, Northcentral, South, or West), residence (urban, suburban, rural), number of siblings, and school dropout rate.

Two of our outcome variables, educational aspirations and grades, are undoubtedly affected by a student's academic ability. Students with limited intellectual gifts may receive poor marks in response to their best efforts and may, quite sensibly, aspire to relatively low levels of educational attainment. In order to guard against such students being mistakenly labeled as disengaged with school, we control for cognitive ability. To do this we include in most of our models¹⁰ the quartile ranking of the respondent's composite score on three tests (reading, vocabulary and mathematics) administered by HSB at the time of the base-year survey.

Analytic Techniques

The analysis has three parts. The first two parts involve evaluations of the effects of a set of variables on two types of outcomes: those measured by an ordinal scale and those measured as dichotomous variables. For the first type of outcome our parameter estimates are based on standard OLS regression techniques. For the latter they are based on probit models.

The third part of the analysis examines the effect of a change in family structure on changes in parental behavior and child outcomes. Here we restrict the analysis to respondents who reported living with both parents in 1980 and for whom we have information on parenting style and school behavior in 1980 and 1982. To determine the effect of a change in family structure on a particular outcome we estimate the following equation:

$$Y_2 = b_1Y_1 + b_2X + b_3Z + e ,$$

where Y_2 is an outcome¹¹ measured in 1982, Y_1 is the same indicator measured in 1980, X is a dummy variable indicating whether or not a disruption occurred between 1980 and 1982¹², and Z is a set of control variables. By including an earlier measure of the dependent variable on the right-hand side of the equation, b_2 may be interpreted as measuring the effect of a change in family structure on a change in the outcome of interest.

RESULTS

Parental Practices and Family Structure

Are children from single-parent and stepparent families less likely to receive adequate encouragement and supervision than children from two-parent families? To answer this question, we estimated two models for each indicator of parenting style. In the first model, parental behavior was treated as a function of family structure plus a set of control variables; in the second model, family socioeconomic status was added to the set of control variables. The first column in each of the tables reports the results of the first model, which omitted socioeconomic status. In the second column we report the results of the full model.

According to Tables 3a-e, children in single-parent and stepparent families report lower parental aspirations, less parental monitoring of school progress, and less general supervision than children living with both parents (column 1 of each table). Respondents living with single parents are more likely to talk regularly with a parent, whereas those living with stepparents are less likely to communicate with their parents. The results are somewhat different once socioeconomic status is added to the model. Controlling for SES, we find that children in single-parent families are less likely to have their schoolwork monitored by either parent and less likely to be supervised outside the home than children in two-parent families, whereas children in

Table 3a

Parental Socialization: Probit Coefficients for
Effects of Race, Family Structure and Socioeconomic
Status on Parental College Aspirations

	Model 1 ^a	Model 2 ^b
Race		
(omitted category is white)		
Black	.46*	.62*
Puerto Rican or Mexican	-.04	.29*
Family Structure		
(omitted category is both parents)		
Single parent	-.18*	-.01
Stepparent	-.21*	-.14*
Other	-.39*	-.22*
Socioeconomic Status		
(omitted category is highest quartile)		
Second		-.49*
Third		-.81*
Lowest		-1.12*
-2 Log Likelihood	13,069	
df	9,734	
Change in log likelihood		+871
Change in df		4

Note: Data base is High School and Beyond Sophomore Cohort, 1986

*p < 0.05.

^aControls for (results not on table) region, residence, sex, and number of siblings, as well as race and family structure.

^bAdds the control variable of SES.

Table 3b

Parental Socialization: Probit Coefficients for
Effects of Race, Family Structure and
Socioeconomic Status on Mother Monitors School Work

	Model 1 ^a	Model 2 ^b
Race		
(omitted category is white)		
Black	.22*	.27*
Puerto Rican or Mexican	.06	.20*
Family Structure		
(omitted category is both parents)		
Single parent	-.29*	-.22*
Stepparent	-.23*	-.20*
Other	-.29*	-.21
Socioeconomic Status		
(omitted category is highest quartile)		
Second		-.18*
Third		-.18*
Lowest		-.51*
-2 Log Likelihood	6,703	
df	9,978	
Change in log likelihood		105
Change in df		4

Note: Data base is High School and Beyond Sophomore Cohort, 1986.

*p < 0.05.

^aControls for (results not on table) region, residence, sex, and number of siblings, as well as race and family structure.

^bAdds the control variable of SES.

Table 3c

Parental Socialization: Probit Coefficients
for Effects of Race, Family Structure and
Socioeconomic Status on Father Monitors School Work

	Model 1 ^a	Model 2 ^b
Race		
(omitted category is white)		
Black	-.03	.03
Puerto Rican or Mexican	.01	.18*
Family Structure		
(omitted category is both parents)		
Single parent	-.74*	-.68*
Stepparent	-.44*	-.40*
Other	-.41*	-.33*
Socioeconomic Status		
(omitted category is highest quartile)		
Second		-.25*
Third		-.43*
Lowest		-.65*
-2 Log Likelihood	9,605	
df	9,165	
Change in log likelihood		+212
Change in df		4

Note: Data base is High School and Beyond Sophomore Cohort, 1986.

*p < 0.05.

^aControls for (results not on table) region, residence, sex, and number of siblings, as well as race and family structure.

^bAdds the control variable of SES.

Table 3d

Parental Socialization: Probit Coefficients for
the Effects of Race, Family Structure, and
Socioeconomic Status on General Supervision

	Model 1 ^a	Model 2 ^b
Race		
(omitted category is white)		
Black	-.10*	-.09
Puerto Rican or Mexican	.02	.05
Family Structure		
(omitted category is both parents)		
Single parent	-.24*	-.22*
Stepparent	-.10*	.09
Other	-.21*	-.19*
Socioeconomic Status		
(omitted category is highest quartile)		
Second		.03
Third		-.05
Lowest		-.07
-2 Log Likelihood	8,888	
df	9,986	
Change in log likelihood		+7
Change in df		4

Note: Data base is High School and Beyond Sophomore Cohort, 1986.

*p < 0.05.

^aControls for (results not on table) region, residence, sex, and number of siblings, as well as race and family structure.

^bAdds the control variable of SES.

Table 3e

Parental Socialization: Probit Coefficients for
Effects of Race, Family Structure and
Socioeconomic Status on Talking to Parents at Least Weekly

	Model 1 ^a	Model 2 ^b
Race		
(omitted category is white)		
Black	-.05	-.01
Puerto Rican or Mexican	-.08	.01
Family Structure		
(omitted category is both parents)		
Single parent	.08*	.14*
Stepparent	-.09*	-.06
Other	-.27*	-.21*
Socioeconomic Status		
(omitted category is highest quartile)		
Second		-.10*
Third		-.24*
Lowest		-.33*
-2 Log Likelihood	13,265	
df	10,073	
Change in log likelihood		87
Change in df		4

Note: Data base is High School and Beyond Sophomore Cohort, 1986.

*p < 0.05.

^aControls for (results not on table) region, residence, sex, and number of siblings, as well as race and family structure.

^bAdds the control variable of SES.

stepparent families report lower parental aspirations and less parental involvement with schoolwork.

It is striking that the differences between single-parent and two-parent families are limited to variables that are sensitive to differences in the amount of time parents have available--monitoring schoolwork and general supervision. The differences between stepparent and two-parent families, on the other hand, include differences in parental aspirations that are more indicative of the quality of the parent-child bond. These results support the idea that parents in nonintact families are either less interested in or less effective at preparing their children for success in school than parents in intact families.

Interestingly, the children of single parents are more likely than the children of two-parent families to spend a relatively large amount of time talking to their parents (Table 3e). This finding supports the hypothesis that single parents make confidants of their children, which until now has not been confirmed in a nationally representative data set. The absence of a significant relationship between this measure and being from a stepparent family is also consistent with this line of reasoning. Once the stepparent (usually a stepfather) moves in, the mother-child bond is weakened, or at least the level of interaction declines.

Parenting Practices and School Achievement

The second part of the analysis focused on two questions: Does family structure affect educational outcomes other than high school completion that might be indicative of disengagement from school? Can differences in school-related parenting style account for any of the difference in educational attainment of children from intact as compared to nonintact families? To answer these questions we estimated a set of regression models that treated educational attainment as the outcome variable and family structure and parental behavior as exogenous variables. The results are reported in Tables 4 and 5.

According to column 1 in Tables 4a-d, children from single-parent and stepparent families are more likely to report early disengagement from school than are children from two-parent families: their grades are lower, their attendance is lower, and their college aspirations are lower. Not surprisingly, children from both types of nonintact families are also more likely to have dropped out of high school (Table 5a, column 1) and less likely to have completed high school or obtained a GED by 1986 (Table 5b, column 1), confirming the findings of past research.¹³

The second column in each of Tables 4 and 5 shows that family socioeconomic status accounts for some of the differences which occur between single-parent families and two-parent families. Socioeconomic status accounts for all of the difference in parental educational aspirations of children in single-parent versus two-parent families

Table 4a

Educational Outcome while in High School: Probit
Coefficients for Effects of Race, Family Structure,
Socioeconomic Status and Parental Socialization
Measures on School Report of Student's Grades

	Model 1 ^a	Model 2 ^b	Model 3 ^c
Race			
(omitted category is white)			
Black	-.03	-.03	-.08
Mexican or Puerto Rican	.06	.09	.05
Family Structure			
(omitted category is both parents)			
Single parent	-.16*	-.14*	-.12*
Stepparent	-.12*	-.11*	-.08
Other	-.27*	-.25*	-.22*
Socioeconomic Status			
(omitted category is highest quartile)			
Second quartile		-.17*	-.11*
Third quartile		-.17*	-.10*
Lowest quartile		-.20*	.21*
Parents' Aspirations			.21*
Mother Monitors School Work			.12*
Father Monitors School Work			.12*
Supervision			.22*
Talks			.12*
-2 Log likelihood	10,970		
df	10,414		
Change in log likelihood		.85	177
Change in df		3	5

Note: Data base is High School and Beyond, Sophomore Cohort, 1986.

* $p < .05$

^aControls for (results not on table) region, residence, sex, number of siblings, school dropout rate, and test scores, as well as race and family structure.

^bAdds the control variable of SES.

^cAdds the independent variables concerning parental socialization.

Table 4b

Educational Outcomes while in High School: OLS
Coefficients for Effects of Race, Family Structure,
Socioeconomic Status, and Parental Socialization
Measures on Student's Attendance Patterns

	Model 1 ^a	Model 2 ^b	Model 3 ^c
Race			
(omitted category is white)			
Black	.20*	.20*	.17*
Mexican or Puerto Rican	.25*	.27*	.22*
Family Structure			
(omitted category is both parents)			
Single parent	-.61*	-.60*	-.51*
Stepparent	-.38*	-.38*	-.32*
Other	-.55*	-.54*	-.45*
Socioeconomic Status			
(omitted category is highest quartile)			
Second quartile		-.001	.05
Third quartile		.04	.10
Lowest quartile		-.06	.03
Parents' Aspirations			
Mother Monitors School Work			.16*
Father Monitors School Work			.34*
Supervision			.23*
Talks			.75*
			.02

Note: Data base is High School and Beyond, Sophomore Cohort, 1986.

* $p < .05$

^aControls for (results not on table) region, residence, sex, number of siblings, school dropout rate, and test scores, as well as race and family structure.

^bAdds the control variable of SES.

^cAdds the independent variables concerning parental socialization.

Table 4c

Educational Outcomes while in High School: Probit
Coefficients for Effects of Race, Family Structure,
Socioeconomic Status, and Parental Socialization
Measures on Whether Student Wants to Attend College

	Model 1 ^a	Model 2 ^b	Model 3 ^c
Race			
(omitted category is white)			
Black	.73*	.85*	.61*
Mexican or Puerto Rican	.29*	.55*	.42*
Family Structure			
(omitted category is both parents)			
Single parent	-.16*	-.01	.00
Stepparent	-.15*	-.10*	-.06
Other	-.24*	-.11	-.10
Socioeconomic Status			
(omitted category is highest quartile)			
Second quartile		.55*	-.43*
Third quartile		.82*	-.61*
Lowest quartile		-1.07*	-.76*
Parents' Aspirations			1.44*
Mother Monitors School Work			-.03
Father Monitors School Work			.16*
Supervision			.40*
Talks			.04
-2 Log likelihood	11,610		
df	10,059		
Change in log likelihood		702	2,084
Change in df		4	5

Notes: Data base is High School and Beyond, Sophomore Cohort, 1986.

* $p < .05$

^aControls for (results not on table) region, residence, sex, number of siblings, school dropout rate, and test scores, as well as race and family structure.

^bAdds the control variable of SES.

^cAdds the independent variables concerning parental socialization.

Table 4d

Educational Outcomes while in High School: Probit
Coefficients for Effects of Race, Family Structure,
Socioeconomic Status and Parental Socialization
Measures on Attitudes toward School

	Model 1 ^a	Model 2 ^b	Model 3 ^c
Race			
(omitted category is white)			
Black	.88*	.91*	.79*
Mexican or Puerto Rican	.42*	.51*	.44*
Family Structure			
(omitted category is both parents)			
Single parent	-.02	.04	.08
Stepparent	-.06	-.04	.01
Other	-.22*	-.17	-.12
Socioeconomic Status			
(omitted category is highest quartile)			
Second quartile		-.32*	-.21*
Third quartile		-.40*	-.24*
Lowest quartile		-.50*	-.28*
Parents' Aspirations			.62*
Mother Monitors School Work			.32*
Father Monitors School Work			.14*
Supervision			.37*
Talks			.24*
-2 Log likelihood	8,966		
df	9,594		
Change in log likelihood		118	673
Change in df		4	5

Note: Data base is High School and Beyond, Sophomore Cohort, 1986.

* $p < .05$

^aControls for (results not on table) region, residence, sex, number of siblings, school dropout rate, and test scores, as well as race and family structure.

^bAdds the control variable of SES.

^cAdds the independent variables concerning parental socialization.

Table 5a

Educational Outcomes: Probit Coefficients for Effects of
Race, Family Structure, Socioeconomic Status and Parental
Socialization Measures on Whether Dropped Out of High School

	Model 1 ^a	Model 2 ^b	Model 3 ^c	Model 4 ^d
Race				
(omitted category is white)				
Black	.12*	.26*	.16*	.17*
Mexican or Puerto Rican	-.14*	.08	.04	.02
Family Structure				
(omitted category is both parents)				
Single parent	-.44*	-.30*	-.28*	-.23*
Stepparent	-.36*	-.33*	-.30*	-.25*
Other	-.78*	-.64*	-.61*	-.50*
Socioeconomic Status				
(omitted category is highest quartile)				
Second quartile		-.29*	-.20*	-.11
Third quartile		-.68*	-.44*	-.35*
Lowest quartile		-.89*	-.70*	-.57*
Parents' Aspirations				
Mother Monitors School Work			.53*	.29*
Father Monitors School Work			.12*	.07
Supervision			.04	-.05
Talks			.28*	.10
			-.01	-.08
Grades				
Wants College				.78*
Attendance				.28*
Attitude				.13*
				.20*
-2 Log likelihood	5,019			
df	9,374			
Change in log likelihood		275	214	683
Change in df		4	5	4

Note: Data base is High School and Beyond, Sophomore Cohort, 1986.

* p < .05

^aControls for (results not on table) region, residence, sex, number of siblings, school dropout rate, and test scores, as well as race and family structure.

^bAdds the control variable of SES.

^cAdds the independent variables concerning parental socialization.

^dAdds the independent variables concerning educational outcomes in high school.

Table 5b

Educational Outcomes: Probit Coefficients for Effects of Race,
Family Structure, Socioeconomic Status, Parental Socialization
Measures and on High School Diploma or GED by 1986

	Model 1 ^a	Model 2 ^b	Model 3 ^c	Model 4 ^d
Race				
(omitted category is white)				
Black	.41*	.45*	.38*	.32*
Mexican or Puerto Rican	.20*	.30*	.25*	.14*
Family Structure				
(omitted category is both parents)				
Single parent	-.46*	-.38*	-.36*	-.30*
Stepparent	-.37*	-.36*	-.33*	-.31*
Other	-.65*	-.59*	-.57*	-.52*
Socioeconomic Status				
(omitted category is highest quartile)				
Second quartile		-.22*	-.17*	-.12
Third quartile		-.31*	-.23*	-.19*
Lowest quartile		-.50*	-.38*	-.35*
Parents' Aspirations				
Mother Monitors School Work			.34*	.18*
Father Monitors School Work			.17*	.09
Supervision			.10*	.02
Talks			.31*	.14*
			-.05	-.09*
Grades				
Wants College				.64*
Attendance				.19*
Attitude				.16*
				.22*
-2 log likelihood	7,074			
df	9,370 ^b			
Change in log likelihood		108	186	937
Change in df		4	5	4

Note: Data base is High School and Beyond, Sophomore Cohort, 1986.

* p < .05

^aControls for (results not on table) region, residence, sex, number of siblings, school dropout rate, and test scores, as well as race and family structure.

^bAdds the control variable of SES.

^cAdds the independent variables concerning parental socialization.

^dAdds the independent variables concerning educational outcomes in high school.

(Table 4c) and a substantial part of the difference in the two educational attainment outcomes (Tables 5a-b). Virtually none of the observed differences in grades or attendance of children in single-parent versus two-parent families are due to socioeconomic status; nor do the negative effects of being from a stepparent family appear to be the consequence of socioeconomic differences for any of the outcomes.

The third column in Tables 4 and 5 reports the effects of family structure after both socioeconomic status and parenting practices are taken into account. These results confirm our hypothesis that part of the difference in children's school achievement across family type is due to differences in parental practices. This is especially true for respondents living with stepparents. Including the parenting variables in the models for school behavior prior to dropping out (Tables 4a-d) substantially reduces the negative effect of living in either a single-parent or a stepparent family on attendance patterns. Differences in parental practices account for much of the negative grade effects (Table 4a) on children living in stepparent as compared to two-parent families. Children from stepparent families appear from these results to be especially disadvantaged with respect to parental aspirations. Since socioeconomic status has been taken into account, differences between stepparent families and two-parent families cannot be due to differences in economic resources. Rather, they suggest that children in stepparent families do not get the full benefits of parental resources. One explanation for this difference is that stepparents may be supporting children in other households, e.g., through child support. Another

explanation is that stepparents do not feel as committed to their children as do natural parents.

The fourth columns of Tables 5a and 5b report the results of a model of educational attainment that includes the four measures of early disengagement from school along with the five measures of parenting style. We ran these models because we were anxious to substantiate the importance of early disengagement from school on eventual educational attainment. The results support our hypothesis that early disengagement from school (that is, more negative behavior and attitudes) **does** lead to low educational attainment (not completing high school or equivalent). All four indicators--grades, aspirations, attendance, and attitudes--have strong positive effects on both staying in school continuously and attaining a diploma or GED by 1986. Despite their importance in predicting final school outcomes, however, the disengagement variables do not explain any additional part of the variation across family types. Rather, they appear to act as intervening variables between parenting practices and school achievement. The disengagement variables account for **all** of the effects of parental monitoring and for over half of the effects of parental college aspirations and parental supervision on educational attainment.

The models reported in Tables 5a and 5b somewhat modify our understanding of the relationship between parent-child communication and school achievement. Our previous estimates suggested that students who reported talking to their parents at least weekly were more likely to report positive values on the early educational outcomes (Tables 4a-d),

whereas the new estimates suggest that greater frequency of communication is negatively related to finishing high school (Table 5a-b). We interpret this change to mean that in most families, high levels of parent-child communication imply a strong parent-child bond, which translates into a positive school experience and school performance. In some families, however, a high level of talking has negative consequences, possibly because the parent is dependent on the child or because the parent is concerned about the child's poor performance. The latter effect is masked until engagement with school, the primary result of good parent-child communication, is held constant.

The Consequences of Changes in Family Structure

The last part of the analysis examined whether changes in parents' marital status lead to changes in parenting practices and children's school performance. The motivation for this last set of models arises from the need to distinguish between parenting behavior that predates family disruption and parenting behavior that follows disruption. In the previous models, parental expectations/practices and family structure were measured at the same time. In the new equations, we restricted our sample to respondents who were living with both parents in 1980, and we created a new family structure variable that measured whether or not a disruption occurred between 1980 and 1982. In order to examine the effect of family disruption on changes in parental practice and school attachment, we included measures of parental behavior and

school engagement in 1980 as regressors in each of the equations. Although this model does not allow us to rule out the possibility that a third, unobserved variable was causing both family disruption and changes in parental or student behavior, it provides a much better estimate of the family disruption effect than the one presented in the previous tables. Moreover, since we observe family disruption during the high school years, we would expect unmeasured characteristics of the parents that strongly affect both family stability and parenting practices to be captured in the 1980 measures of parental behavior. The results of this model are reported in Tables 6a and 6b.

The results indicate that children who experienced a family disruption between 1980 and 1982 reported negative changes in four of the five measures of parenting practices. Marital disruption leads to reductions in the amount of time parents spend monitoring schoolwork and supervising their children, and reductions in parent-child communication. The change in parenting practices is strongest for father's monitoring of schoolwork, which reflects the fact that most children live with their mother after a divorce.

Table 6b reports similar coefficients for the four measures of disengagement from school. According to these estimates, marital disruption is accompanied by higher truancy and negative changes in attitudes about schooling. It is interesting to note that marital disruption appears to be associated with behavioral and affective change, rather than with changes in more cognitive phenomena such as aspirations and grades.

Table 6a

Probit Coefficients for Effects of Race, Socioeconomic Status and Parents' Marital Disruption on Parental Socialization in 1982 as Compared to 1980^a

	Parental Aspirations	Mother Monitors	Father Monitors	Supervision	Talks
Race					
(omitted category is white)					
Black	.76*	.22*	.05	.09	.09
Mexican or Puerto Rican	.37*	-.04	-.02	.14	.10
Socioeconomic Status					
(omitted category is highest quartile)					
Second quartile	-.52*	-.11	-.18*	-.04	-.15*
Third quartile	.69*	-.11	-.19*	-.04	-.15*
Lowest quartile	-.84*	-.18*	-.39*	.01	-.20*
Marital Disruption after 1980	-.13	-.31*	-.49*	-.34*	-.22*

Note: Data base is High School and Beyond, Sophomore Cohort Respondents Living with Both Parents in 1980.

* $p < .05$

^aEffects reported are net of region, residence, sex, number of siblings, school dropout rate, and test scores.

Table 6b

Effects^a of Race, Socioeconomic Status, and Parents'
Marital Disruption Outcomes Measured in 1982
as Compared to Outcome in 1980^b

	Grades	Wants College	Attendance	Attitudes
Race				
(omitted category is white)				
Black	.03	.44*	.03	.53*
Mexican and Puerto Rican	.08	.25*	.03	.36*
Socioeconomic Status				
(omitted category is highest quartile)				
Second quartile	-.06	-.28*	.14*	-.26*
Third quartile	-.14*	-.48*	.18*	-.39*
Lowest quartile	-.15*	-.65*	.28*	-.43*
Marital Disruption after 1980	-.07	-.12	-.29*	-.25*

Note: Data base is High School and Beyond, Sephomore Cohort respondents living with both parents in 1980.

*p < .05

^aEffects for grades, wants college, and attitudes are probit coefficients. Effects for attendance are OLS coefficients.

^bEffects reported are net of region, residence, sex, number of siblings, school dropout rate, and test scores.

CONCLUSIONS

This paper provides a more detailed view of the relationship between family structure and the process of school failure than has been reported up until now. We began by addressing the question of whether children who live with single parents or stepparents receive less parental encouragement and attention with respect to educational activities than do children who live with both biological parents. The answer clearly is yes. Children from nonintact families report lower educational expectations on the part of their parents, less monitoring of schoolwork by mothers and fathers, and less overall supervision of social activities than children from intact families. The one exception to this statement is that children in single-parent families spend significantly more time talking to their parent than children in two-parent families, which has a positive effect on school achievement. These differences are not simply a reflection of differences in socioeconomic status, since they persist after socioeconomic status indicators are taken into account.

The second question addressed in the analysis was, Do school-related parenting practices affect early disengagement from school? Again, the answer is yes. Parent's educational aspirations, parent's monitoring of schoolwork, general supervision, and parent-child communication are related to all of the school achievement indicators, including grades and attendance as well as attitudes and expectations. We also show that changes in parents' marital status are related to

changes in parenting practices and respondent's school attachment.

Third, we asked whether differences in parenting practices could account for the higher rates of school dropout among children from nonintact families. Here the answer is less straightforward. Our research indicates that while differences in parental behavior account for part of the difference in school disengagement up through the senior year, parenting practices do not explain very much--less than 10 percent--of the difference in graduation rates (Tables 5a and 5b). This may be due in part to the fact that dropping out of school is a rare event which only occurs when disengagement is very high. Thus, parenting practices appear to have their strongest effect on the least severe behaviors: aspirations, attendance, grades, and attitudes toward schoolwork.

A key finding of this study is that growing up in a stepparent family has virtually the same negative consequences on all aspects of the educational attainment process as does growing up in a single-parent family. If anything, the former appears to be somewhat more negative than that latter. The fact that remarriage does not mitigate the negative consequences associated with family disruption suggests that it is not only the number of adults in the household that is critical for helping children navigate the schooling process, but also the quality of the parent-child relationship. Stepparents, on average, do not substitute for biological parents, at least with respect to providing guidance and supervision. Whether this is due to resistance on the part of the child or to lack of interest on the part of the parent is not

clear at this time, but the negative association between living in a reconstituted family and children's achievement is consistent with other research.¹⁴

The finding concerning stepparents has implications for Coleman's concept of social capital. Coleman (1988) has argued that the effects of family background on educational attainment can be attributed to three types of capital: financial capital (family income/wealth), human capital (parental education), and social capital. The last refers to that which inheres in the relationship between the parent and child, which allows the child to take advantage of whatever financial and human capital the parent has and translate it into her (his) own human capital. Coleman has pointed out that the number of parents in the household is an indicator of children's social capital. We would add that the degree of attachment between parent and child is also an indicator of social capital. Thus, a child may live with two parents, but her or his access to social capital depends on (1) the willingness and ability of the parents to provide the child with time and attention, and (2) the receptivity of the child to parental (especially stepparental) overtures.

Two ideas for future research emerge from this work. First, a better set of measures for school-related parenting practices would be enormously helpful. The measures we used were not exhaustive and all were subject to the measurement error inherent in single-item indicators. Multiple-item scales on a number of dimensions of parenting practices would help refine our results. In particular, we recommend

that surveys improve the collection of data concerning patterns of parental supervision and parent-child communication patterns.

Second, it would be interesting to extend the outcomes under investigation forward to include postsecondary school experiences as well as backward to include early school achievement. Dropping out of high school is a very extreme outcome; very few students stop high school before graduation, and fewer still remain without a degree through their twentieth birthday. It may be the case that parental practices mediate the effect of family structure on whether or not a child ever attends college or graduates from college. That is to say, when the outcome under investigation is less rare, as it was in the case of the early school disengagement indicators, the subtleties of the mechanism may be easier to detect.

Notes

¹The average income of stepparent families is substantially higher than the income of single-parent families, but somewhat lower than that of two-parent families (Sandefur, McLanahan, and Wojtkiewicz, 1989).

²One exception is a study by Abrahamse, Morrison, and Waite (1987), who look at the effects of parental control on adolescent pregnancy.

³The Mexicans and Puerto Ricans are grouped together in all analyses that follow. Early tabulations indicated that there were no significant differences between the Mexican and Puerto Rican groups.

⁴This variable will be referred to as "wants college" in the tables, to avoid confusion with parental aspirations.

⁵The grades variable used in the change analysis (Table 6b) is based on the student's self-report, which was collected in both the 1980 and 1982 waves of data collection. This is because the transcript grade was only recorded once, during the base-year survey. We thought it best, when looking specifically at change, to use a variable measured in the same way at both times.

⁶Principal components analysis on these two items indicated that they measure the same thing. We use both, added together, in order to reduce the measurement error which stems from single-item indicators.

⁷Respondents living with neither parent are referred to as in the tables as having "other" family structure.

⁸One potential problem with these measures is that they are reported by the student and not by the parent. More accurately, we may refer to them as the student's perception of parental socialization for school. It is not clear to us that it would be preferable to have measures reported by the parent. We feel that the student reports are probably biased by the fact that normal adolescents often have conflict with their parents and may consequently report exaggerated levels of parental neglect. On the other hand, parents may make self-serving claims of interest which are artificially high.

⁹In 1980 the questionnaire item referred specifically to the respondent's mother. In 1982 it referred to the respondent's parents.

¹⁰Test scores are included in the models whose results are reported in Tables 4 through 6.

¹¹All five parental socialization measures and all four disengagement measures were collected from those who were still in school in 1982. Only the two educational aspirations variables, how often the parent and respondent talked, and the attitude questions were asked of the dropouts. The result is that for the latter four measures our models include the entire sample of children living with both parents in 1982 and for the other five only those who did not drop out. This bias, although unfortunate, should lead us to underestimate rather than overestimate the effects of marital disruption. This is because those for whom the marital disruption was accompanied by changes so great they resulted in actual dropout are eliminated. If we find that

marital disruption has an effect, even on those who manage to at least stay in school, we are safe in assuming it probably had an impact on those who did not.

¹²Respondents who were in category 1 (both natural parents) in 1980 and category 4 (neither natural parent) in 1982 were coded as 0 (no marital disruption). This is because we were afraid that some of these cases represented youngsters who had moved out of the parental home rather than youngsters who had both of their parents move out. This introduces a conservative bias, since if we are miscounting it is by coding some whose parents' marriages disrupted as still together.

¹³In Table 5a the dependent variable is coded 1 if the respondent NEVER dropped out of school and 0 otherwise. We proceeded this way so that the signs of the coefficients would have the same meaning in Tables 4 and 5. To avoid awkwardness in the text, however, we refer to this outcome as high school dropout.

¹⁴For a discussion of the ambiguities of the reconstituted family, see Cherlin (1981). Also, see Hetherington and Arasteh (1988).

References

- Abrahamse, A., P. Morrison, and L. Waite. 1987. "Single Teenage Mothers: Spotting Susceptible Adolescents in Advance." Paper presented at the annual meetings of the Population Association of America, Chicago.
- Alwin, D.F. 1984. "Trends in Parental Socialization Values: Detroit 1958-1983." American Journal of Sociology 90(2):359-382.
- Baker, D.P. and D.L. Stevenson. 1986. "Mother's Strategies for Children's School Achievement: Managing the Transition to High School." Sociology of Education 59:156-166.
- Bane, M.J. and D. Ellwood. 1983. "The Dynamics of Dependence: The Routes to Self-Sufficiency." Report prepared for Assistant Secretary of Planning and Evaluation, Department of Health and Human Services.
- Bidwell, C.E. and N.E. Friedkin. 1988. "The Sociology of Education." In Handbook of Sociology, ed. N. Smelser, pp. 449-471. Beverly Hills, Calif.: Sage.
- Bumpass, L. 1984. "Children and Marital Disruption: A Replication and Update." Demography 21(1):71-82.
- Chase-Lansdale, P. Lindsay, and E. M. Hetherington, "The Impact of Divorce on Life-Span Development: Short and Long-term Effects." Forthcoming in D. L. Featherman and R. M. Lerner, eds., Life-Span Development and Behavior, Vol 10.

- Cherlin, A. 1981. Marriage, Divorce, and Remarriage. Cambridge: Harvard University Press.
- Clark, R.M. 1983. Family Life and School Achievement: Why Poor Black Children Succeed in School. Chicago: University of Chicago Press.
- Coleman, J.S. 1988. "Social Capital in the Creation of Human Capital." American Journal of Sociology 94:S94-S120.
- Corcoran, M., R. Gordon, D. Laren and G. Solon. 1987. "Intergenerational Transmission of Education, Income and Earnings." Ann Arbor: Institute of Public Policy Studies, University of Michigan.
- Devall, E. 1986. "The Impact of Divorce and Maternal Employment on Pre-Adolescent Children." Family Relations 35:153-159.
- Dornbusch, S.M., J.M. Carlsmith, S.J. Bushwall, P.L. Ritter, H. Leiderman, A.H. Hastorf, and R.T. Gross. 1985. "Single Parents, Extended Households, and the Control of Adolescents." Child Development 56:326-341.
- Douthitt, R. 1989. "A Comparison of Time Spent with Children by Mothers in Single- versus Two-Parent Households." Prepared for the Annual Meetings of the USDA Regional Research Project.
- Duncan, G. and S. Hoffman. 1985. "A Reconsideration of the Economic Consequences of Marital Dissolution." Demography 22:485-497.
- Furstenberg, F.F., C.W. Nord, J.L. Peterson, and N. Zill. 1983. "The Life Course of Children of Divorce: Marital Disruption and Parental Contact." American Sociological Review 48:656-668.

- Garfinkel, I. and S.S. McLanahan. 1986. Single Mothers and Their Children. Washington D.C.: Urban Institute Press.
- Hetherington, E.M. and J.D. Arasteh. 1988. Impact of Divorce, Single-Parenting, and Step-Parenting on Children. Hillsdale, N.J.: Laurence Erlbaum Associates.
- Hetherington, E.M., M. Cox, and R. Cox. 1978. "The Aftermath of Divorce." In Mother-Child Father-Child Relations, ed. J.H. Steven. Washington, D.C.: National Association for the Education of Young People.
- Hogan, D.P. 1980. "The Transition to Adulthood as a Career Contingency." American Sociological Review 45(2):261-276.
- Hogan, D.P. and E.M. Kitagawa. 1985. "The Impact of Social Status, Family Structure and Neighborhood on the Fertility of Black Adolescents." American Journal of Sociology 90(4):825-855.
- Krein, S.F. and A.H. Beller. 1986. "Family Structure and the Educational Attainment of Children: Differences by Duration, Age and Gender." Paper presented to the Annual Meetings of the Population Association of America, San Francisco, California.
- McLanahan, S.S. 1985. "Family Structure and the Intergenerational Transmission of Poverty." American Journal of Sociology 90:873-901.
- McLanahan, S.S. and L. Bumpass. 1988. "Intergenerational Consequences of Family Disruption." American Journal of Sociology 94(1):130-152.

- McLanahan, S.S., N.M. Astone and N.F. Marks. 1988. "The Role of Mother-Only Families in the Reproduction of Poverty." Presented to the Conference on Poverty and Children, Lawrence, Kansas.
- Nock, S.L. 1988. "The Family and Hierarchy." Journal of Marriage and the Family 50:957-66.
- Sandefur, G.D., S.S. McLanahan, and R.A. Wojtkiewicz. 1989. "Race and Ethnicity, Family Structure, and High School Graduation." Discussion Paper no. 893-89, Institute for Research on Poverty, University of Wisconsin-Madison.
- Sewell, W.H. and R.M. Hauser. 1975. Education, Occupation and Earnings: Achievement in the Early Career. New York: Academic Press.
- Sewell, W.H. and V.P. Shah. 1968. "Social Class, Parental Encouragement and Educational Aspirations." American Journal of Sociology 73:559-572.
- Steinberg, L. 1987. "Single Parents, Stepparents, and the Susceptibility of Adolescents to Antisocial Peer Pressure." Child Development 58:269-275.
- Wallerstein, J. and J. Kelly. 1979. Surviving the Breakup: How Children and Parents Cope with Divorce. New York: Basic Books.
- Weiss, R. 1979. "Growing Up a Little Faster: The Experience of Growing Up in Single-Parent Households." Journal of Social Issues 35:97-111.
- Williams, T. and W. Kornblum. 1985. Growing Up Poor. Lexington, Mass.: Lexington Press.