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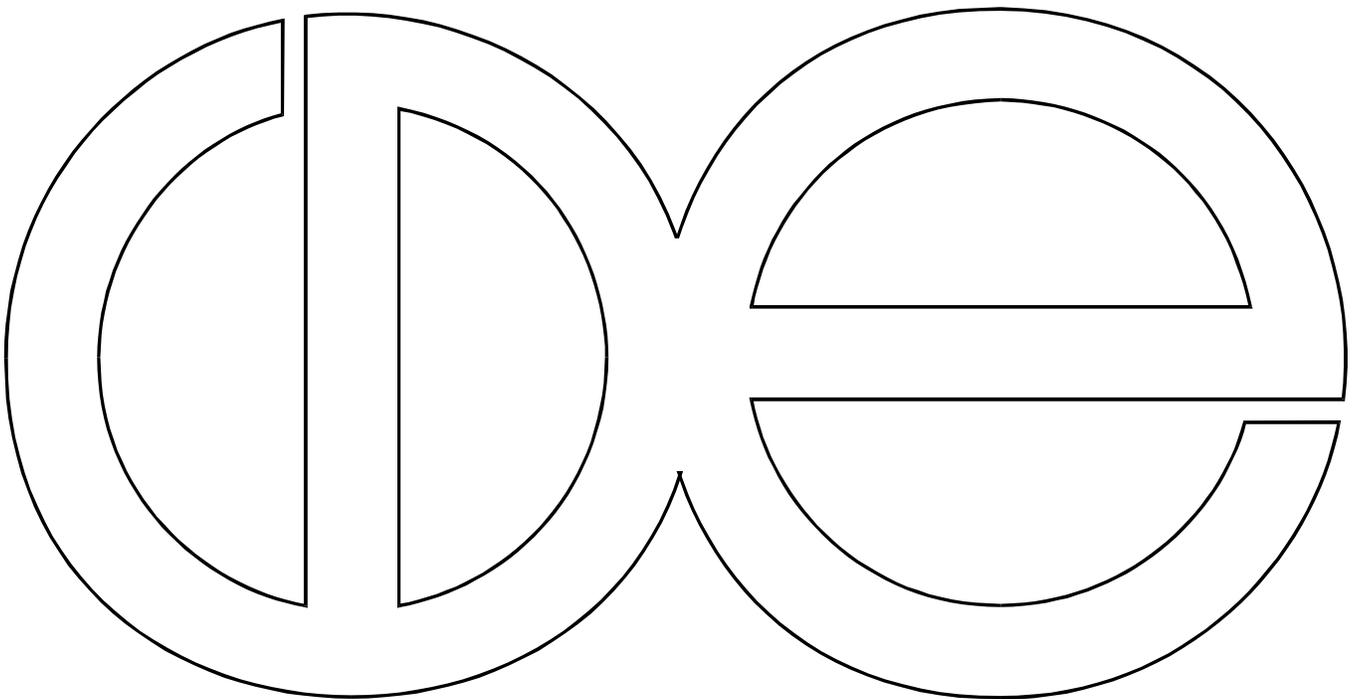
University of Wisconsin-Madison

The Effects of Parent's Unrealized Educational Aspirations on Children's Educational Outcomes

Jennifer Sheridan

CDE Working Paper No. 99-33

"Getting the College Education That I Didn't Get":

The Effects of Parent's Unrealized Educational Aspirations on Children's Educational Outcomes

By

Jennifer Sheridan
University of Wisconsin-Madison

March 2001

Abstract

This paper assesses the effects of parents' unrealized college aspirations on their children's educational outcomes. The Wisconsin Longitudinal Study data are used to examine whether a parent who wanted to attend college and either never attended, or attended but did not graduate, has a significant effect on four educational transitions (High School Graduation, College Attendance, College Graduation, and Graduate School Attendance) of their children. I take care to model parents' education effects as both a linear effect of years of education, and also allow for possible "floor" effects of parents' own educational attainment. Additionally, I look at whether any effects of parents' unrealized college plans affect their children's transitions through the parents' goals for the children's education.

Using logistic regression analysis (and adjusting standard errors using GEE methodology where appropriate), I find that the children of parents who planned to attend college have significantly higher odds of Completing High School, Attending College, and Graduating College, for every level of parents' education. Furthermore, this relationship differs by the gender of both parent and offspring. Unrealized educational ambitions especially have an effect for the College Attendance and Graduate School Attendance transitions. Mothers appear to set an educational "floor" for these two transitions as well, especially for their daughters, regardless of their youthful ambitions. These effects appear to operate primarily through the parent's goals for his or her child's education, but in the case of College Attendance, the unrealized aspirations continue to have a small but direct effect even once these goals for the child are controlled. Implications of these findings are discussed.

In his 1953 study of the educational aspirations and attainment of "common man" sons, Joseph Kahl wrote: "He blamed his failure on insufficient education, and was determined that his son would do better" (Kahl 1957, p. 287). This idea that children fulfill their parent's unrealized goals and aspirations is a common one, yet one which has been little studied. In this paper, I will use data from the Wisconsin Longitudinal Study to determine the extent to which a parent's own educational goals, and the attainment of those goals, affect a child's educational outcomes. In addition, I will look at one possible mechanism for this link between parents' goals for themselves and their children's educational outcomes—the parents' stated aspirations for their children's education. If parents' unrealized college ambitions do indeed affect their children's outcomes, it is likely that this occurs because these parents set higher educational goals for their children than similarly-educated parents who never desired to attend college.

Despite the wealth of literature elucidating the relationship between educational aspirations and educational achievement, few studies have examined the intergenerational link between the two. That is, much work has been done to examine the relationships among a parent's attainment, the parent's aspirations for his or her child, the child's educational aspirations, and the child's eventual attainment. Furthermore, a great deal of research has focused on how other characteristics of the parent related to the parent's educational attainment (such as socioeconomic status, number of children, working on a farm, etc.), affect the parent's aspirations for his or her child's education, the child's educational aspirations for him- or herself, and the child's actual educational attainment (Sewell and Shah 1968; Sewell and Hauser 1975; Otto and Haller 1979; Davies and Kandel 1981; Hauser, Tsai and Sewell 1983; Jencks, Crouse and Mueser 1983; Wilson

and Wilson 1992; Marjoribanks 1992). Yet surprisingly little work has been done to investigate how the parent's aspirations for him- or herself affect outcomes for the child, despite Kahl's early study, and despite popular notions. It is these latter questions on which I will focus this paper.

Relationship of Parent's Own Educational Aspirations on Child's Aspirations and Attainment

A few studies have included a parent's aspirations for his- or herself into analyses on outcomes for their children, and have found significant effects. In her dissertation, Susan Janssen (1982) found that when parents (specifically, mothers) planned to go to college, they were significantly *less* likely to have aspirations for their children to attend college (the effect of college plans was positive, but not significant, for fathers). Older studies (Kahl 1953; Cohen 1965) link parents' dissatisfaction with their *occupational* achievements with their aspirations for children's *education*. They have found that fathers who are unhappy with their jobs had higher educational aspirations for their sons than fathers who were satisfied with their jobs (Kahl 1953; Cohen 1965). Kahl, in particular, relates this occupational dissatisfaction with a "handicap of poor education" (Kahl 1953, p. 193). Similarly, Krauss (1964) identified "discrepant situations" as one source of children's educational aspirations (plans), and suggested that mothers influenced the educational plans of their children:

> "The working-class mother whose occupational status is higher than her husband's is likely to come in contact with middle-class persons and to acquire middle-class values. If her husband's status seems unlikely to improve, *she may attempt to realize her aspirations through her children* by encouraging them to develop middle-class interests and objectives (Krauss 1964), p. 86, italics mine)."

While several studies do not specifically address how a parent's aspirations for him- or herself affect the outcomes of children, they do use measures of parents' values for education as important independent variables. These values are related to parent's own educational aspirations, as in Kahl's notion of "getting-ahead vs. getting-by" values of parents, where parents with higher educational ambition have a "getting-ahead" outlook, and they pass this on to their children (Kahl 1953). Katkovsky et al. (1964) found that parents held values for intellectual achievement for their children, particularly their daughters, that were similar to their own (Katkovsky et al. 1964). Marjoribanks (1995) incorporated measures such as parents' press for learning, independence, and individualism-collectivism (what he calls "academic socialization", an attempt to operationalize Kahl's notion of "getting-ahead" vs. "getting-by" attitudes) in his study of Australian youths, but found no association with their children's educational aspirations (Marjoribanks 1995).

Finally, a great deal of research incorporates measures of "parental encouragement" into models of children's educational attainment, beginning with the classic Wisconsin studies (Sewell and Shah 1968; Sewell, Haller, and Portes 1969; Sewell, Haller, and Ohlendorf 1970; Sewell and Hauser 1975), with the finding that incorporation of these "parental encouragement" variables greatly increases the variance of children's educational attainment explained. Expansions of this research focus on the differentiation between parent's goals for children and the children's perception of those goals (Smith 1981; Smith 1991), separation of parent's encouragement from peer influences (Otto and Haller 1979; Davies and Kandel 1981), and sex differences in the

relative influence of parental encouragement on children (Sewell and Shah 1968; Sewell, Hauser and Wolf 1980; Davies and Kandel 1981; Smith 1981; Smith 1991).

Educational "Floor" Effects

An additional way that parents might influence the educational outcomes of their children is through family norms of educational attainment that effectively set the parents' educational attainment as a "floor" for the children's attainment. That is, if parents are high school graduates, the children will be *at least* high school graduates; if parents attended college, the children will *at least* attend college (Boudon 1974; Collins 1979; Mare and Chang 1998). This concept is an important piece in the question of whether parents' unrealized educational aspirations affect their children's outcomes, because it suggests that the educational "floor" for those who wanted to attend college and did not is set at the level of *aspiration*, and not at the level of actual attainment.

In this study, I follow Mare and Chang (1998) by adding an indicator of whether a parent completed the educational transition being modeled for the child. The existence of such a "floor" effect, and the degree to which it is strengthened or mediated by inclusion of information about the parents' own educational goals will be examined.

Gender Differences

The question of sex differences in the effects of parents' aspirations on their children's outcomes is an important one, and one which as rarely been empirically examined (but see Katkovsky, Preston and Crandall 1964). Do mothers' own aspirations affect the children more than fathers' own aspirations? Do the parents attempt to realize their unattained ambitions through their same-sex child, or is it only sons (or daughters) who benefit? Do the gender differences vary by educational transition of the child? That

is, do mothers make sure their daughters at least enter college, while fathers make sure their sons at least graduate college? Finally, does the reason for the unattained college ambition matter to the child's outcomes, and does this differ by gender? If a parent wanted to attend college and *never* went (that is, has a high school education or less), does this affect the child's attainment differently from a parent who wanted to attend college and did enter, but dropped out and never completed the bachelor's degree? The *reason* for the dropout could matter, and could differ by sex. For example, a respondent who wanted to attend college and did, but did not graduate could have entered college and found out that it was too difficult or cost too much money relative to the "payoff" he would receive upon graduation, so he dropped out. Or, the respondent could have dropped out because she got married or had a child. The meaning of the educational goals to the respondent, the reasons for not attaining them, and the resulting impact of that on the rest of the life course undoubtedly differs by gender. Additionally, the transfer of these unattained aspirations to the child could also differ by gender. In particular, mothers who had to curtail their educational attainment for family reasons might be more inclined to make sure their daughters do not do the same thing, while fathers who dropped out because they found college unnecessary to earning a good living might not have such an interest in seeing their sons attend college. Although the reasons for not attaining the college ambitions are not examined in this analysis, detailed interactions by sex of parent and sex of child are examined, in order to better determine these differing patterns.

As with the question of how the effects of unrealized educational aspirations might differentially affect daughters and sons depending on the sex of the parent with the unattained college plans, the educational floor for family levels of attainment might be

different depending on the gender of the child, gender of the parent, or both in combination. For example, mothers might set the floor for daughters and fathers for sons, or fathers might set the floor for all children. These possibilities will also be examined.

Data and Methods

In this analysis, I use data from the Wisconsin Longitudinal Study (WLS) to investigate the effects of parent's educational aspirations for themselves (operationalized as plans to attend college following high school graduation) on the educational outcomes of their children. The WLS is a random sample of 10,317 persons who were seniors in Wisconsin high schools in 1957. Because of this sampling frame, very few of the WLS respondents are members of ethnic or racial minority groups, and so racial/ethnic comparisons will not be investigated in this paper. In 1957, *all* seniors in Wisconsin filled out a paper-and-pencil survey about their immediate plans after high school. The survey included detailed questions about educational and occupational plans, specifically asking whether the respondent wanted to go to college after he or she graduated from high school. 10,317 of these seniors were randomly sampled, and a follow-up study was completed in 1975, where the respondents were again asked to "think back to when they were seniors in high school" and indicate whether they had wanted to attend college at that time, and what the highest degree was they had hoped to attain. Other detailed information about the respondents was also obtained, including educational outcomes, job information, family income, marital histories (with information collected about the education and occupation of the first spouse and the current spouse), and childbearing histories. Measures of mental ability were obtained from the Wisconsin State Testing Service, which kept lists of the

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scores on the Henmon-Nelson Test of Mental Ability taken by all Wisconsin high school freshmen and juniors from the 1950s to the early 1970s (Hauser, Sheridan and Warren 1999, pp. 351-353). These Wisconsin high school graduates are the "parents" in this analysis, and may be referred to as "respondent-parent" to avoid confusion. In 1975, a roster of the respondent's children was taken, and sex and birth date were recorded for all of the respondent's kids. Additionally, one child from this roster was chosen at random. Detailed questions were asked about that child, including what educational aspirations, if any, the respondent had for that child. The spouse of the WLS respondent who is the other "parent" of this randomly selected child will be referred to as "spouse-parent"[1]. In 1992/93, another follow-up study was completed. Educational outcomes for the WLS respondents were updated, and this time more questions were asked about *all* of the respondents' children, including the relationship of the child to the respondent (biological, adopted, step, etc.), whether the child had died, where the child lives (with respondent, on own, in school, etc.), whether the child has married, and most importantly, the educational attainment of the child. Even more detailed information about the child who was randomly selected in 1975 was also obtained, including degrees obtained, occupational attainment, military participation, and the amount of contact between the parent-respondent and the child. By 1992/93, most of the children of the WLS respondents were over age 19 (98 percent), and 29 percent were in their thirties. All respondents who reported at least one child and responded in 1992/93 are the base sample for my analysis. This subsample contains 75.7 percent of the original WLS sample, and 92.0 percent of the

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[1] In a small number of cases, it was difficult to determine who the non-WLS respondent parent of the selected child was. In these cases, the spouse who was married to the child's WLS respondent-parent for the longest time during the selected child's first 18 years was chosen as the spouse-parent.

respondents in 1992/93 (Table 1). This sample is slightly reduced when I consider only the biological or adopted children of the WLS respondents who were still alive at the time of the 1992/93 interview, for whom parents provided at least gender information, who are at least 20 years old, and who have completed at least 8 years of education[2]; 87.7 percent of the 1992/93 respondents have at least one child who fits these constraints.

I will perform two basic sets of analyses in this paper, both using logistic regression analysis on the log-odds of children making one of four educational transitions. In the first set of analyses, I use *all* children of a WLS respondent to estimate the log-odds of a child (1) Completing High School, (2) Attending College, (3) Graduating College, and (4) Attending Graduate School. General Estimating Equations (GEE) analysis is used to adjust the standard errors, in order to retain as much statistical power as possible. The purpose of these models is to discover whether, net of parent's education and other family background measures, children of parents who had college aspirations have higher log-odds of making educational transitions, and whether these log-odds are increased or decreased for particular gender compositions of parent and child.

The second set of analyses utilizes the "selected child" data in the WLS. In 1975, one of the respondent-parent's children was chosen at random, and the respondent answered detailed questions about that child. One of the questions was about the respondent-parent's educational aspirations *for the child*. In the second set of analyses, I will add this information to the model, in order to ascertain whether the pathway from respondents' educational aspirations for themselves to their children's attainment is

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[2] Children who are over 20 years old and have not entered high school may have special needs or disabilities that would keep them from being "at risk" for any of the educational transitions analyzed in this paper. They are therefore excluded from this analysis (Seltzer, personal communication).

through having high educational goals for their children. Because the children in this set

of analyses were randomly chosen, standard errors of the logistic regression estimates do

not need to be adjusted; however, the necessarily higher numbers of selected children from

smaller family sizes needs to be kept in mind[3]. Additionally, many of the detailed gender

interactions will not be included because of the contraints of sample size. This will partly

be compensated for by the presence of variables for both the mother and father of the

selected child.

The dependent variable in most of the analyses will be the log-odds of a selected

child's completion of an educational transition:

$$\ln\left(\frac{p_{ij}}{1-p_{ij}}\right) = \beta_{j0} + \sum_{k}\beta_{jk} X_{ijk} \; ,$$

where p_{ij} is the probability that the ith individual will make the jth school transition, X_{ijk} is

the value for the ith child decides to make the jth transition on the kth independent variable,

and the β_{jk} are parameters to be estimated from the data. Following the example set by

Mare (1980), I will estimate models separately for each level of educational achievement.

As mentioned above, four transitions altogether will be looked at: High School

Graduation, College Attendance, College Graduation, and Graduate Education. Very few

of the selected children of the WLS respondents did not complete high school (less than

five percent—see Table 2); thus, lower levels of educational transitions will not be

modeled. To keep the model simpler, I will collapse the College Degree and Post-

Bachelors Schooling categories of respondents in all models except those for the child's

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[3] When one child from a sibship is selected at random, a child from a smaller sibship has a higher probability of being selected. Thus, in this random subsample of children, there is a larger number of first- or second-born children than would occur if these children were sampled completely at random.

transition to Graduate School. Because the ages of the selected children are varied, I will drop from the sample cases where the selected child is under age 20 for the High School Graduate and College Attendance transitions, to ensure that all children are old enough to be "at risk" of making these transitions. I drop all children under age 25 for the College Degree and Graduate School transitions, for the same reason. Furthermore, following Mare (1980), I drop those who have not completed a prior transition from the pool for those at risk of each transition. For example, children who did not complete high school are dropped from the sample, and are not considered at risk of making the "Attended College" transition. Similarly, those children who did not Attend College are not at risk of attaining the College Degree, and those who did not complete their College Degree are not at risk of attending Graduate School. Table 2 provides the percentage of children and selected children making each transition, by sex of respondent-parent.

Adjustment of Standard Errors for Clustered Observations

In the first part of the analysis I use the parents' reports of *all* of their children's educational attainments collected in the child roster section of the 1992/93 survey. Because a respondent could have reported on anywhere from one to nine children who fit the constraints of being biological or adopted children, over age 19, alive, and educational attainment data not missing, an adjustment must be made to compensate for the fact that the children of the WLS respondents taken together are not a simple random sample. True, their parents are, but we know that children's educational attainment is not independent of their parents' levels, and we would expect a higher correlation of educational attainments of children in the same sibship than we would expect from

randomly-chosen individuals. The standard errors of the estimates of a normal logistic regression model are too small; the clustered nature of the data must be taken into account.

This problem of the "clustering" of responses exists not only in families, classrooms, neighborhoods, businesses, or other situations where outcome measures are collected from respondents who are connected in some way, but also in data where there are repeated measures over time for the same research participant. One solution to the problem of the clustering of responses is to weight each response by 1/n, where n is the number of observations in the cluster (in this case, the size of a sibship). This method has the advantage of being easy to implement and the most conservative (in the sense that it would produce the highest standard errors), but it also loses a great deal of statistical power, especially to the extent that the responses in the cluster are less correlated to each other.

Another solution is to model the covariance structure of the observations as well as the variances. This procedure, called "General Estimating Equations" (or GEE) analysis in the SAS software, adjusts standard errors proportional to the amount of covariance in the observations. Several different models of the covariance can be tested, and if the dependent variable is dichotomous an additional parameter can be estimated (α_1), indicating the common log-odds ratio for all clusters.

For the analyses that include all of the WLS respondents' children, I will employ this GEE covariance analysis to adjust the standard errors. I used the "exchange" structure for the covariance matrix, which tended to give standard error estimates that were slightly smaller than those using the simple weighting technique described above. Additionally, I specify the use of log odds ratios by cluster, to estimate the α_1 association parameter

properly (Carey, Zeger and Diggle 1993)[4]. Alpha-1 is the common log-odds ratio for all

sibships.

Dependent Variables

The first dependent variables I analyze are the educational transitions of all WLS

respondents' children. These transitions are measured based on the respondent-parent's

response to questions about how many years of education the child has attended, and

whether the child completed that grade or year. Included in each subsample for analysis of

a particular level of education are all those who completed the transition before. As

mentioned above, the four educational transitions of the children analyzed are: High

School Graduation; College Attendance; College Graduation; Graduate School

Attendance. The main analyses of these transitions will be performed on all of the

children of the WLS respondents, with adjustments of the standard errors to account for

the correlation of siblings. An additional analysis will focus only on a randomly-selected

child of the WLS respondent (the "selected child"), in order to ascertain the additional

effects of respondent's aspirations for their children—a question only asked of

respondents in regard to this randomly-selected child. Descriptive statistics for the

educational transitions of the children (for both the entire sibship, and also for the

"selected child") are found in Table 2.

In the analyses of the selected children, an additional dependent variable indicating

the respondent-parent's educational aspirations *for the selected child* is used. Two

dichotomous variables were created to indicate the respondent's level of educational

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[4] The SAS procedure GENMOD was used to estimates these clustered standard errors, with the exchangeable log odds ratios (rather than correlations) the LOGOR=EXCH option.

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aspiration for his or her selected child[5]. The first indicates the respondent wanted the

selected child to *at least* attend college; thus, wanting the child to Attend College,

Graduate College, or get an Advanced Degree is contrasted with only wishing the selected

child to get a high school diploma or "whatever the child wants." The second indicator for

respondent's aspirations for the selected child compares those who wanted their selected

child to *at least* graduate college, to those who wished for less. Wanting the selected child

to get a Bachelor's degree was the most common response of respondents, with wishing

for a high school education the second most common response (see Table 2.) For

respondents who answered that their selected child's "current educational attainment" is

satisfactory, I substituted the selected child's actual level of attainment for the parent's

aspiration.

Independent Variables

The independent variables, or X_{ijk} variables, in these models are divided into three

groups. The first are gender (of child and of respondent-parent), age (age of child over 20

for High School Completion and College Attendance transitions; age over 25 for College

Completion and Graduate School transitions), respondent-parent's mental ability (Hemon-

Nelson test score, divided by 10)[6], and educational attainment of the parent-respondent.

The parent-respondent's educational attainment is modeled both as a linear effect (years of

education), and also as a "floor" effect. That is, I allow the possibility that children of

parents who completed a particular transition might have higher log-odds of completing

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[5] Where available, I use the 1975 measure. If this is missing, I use the same question from the 1992/93
survey. Using the variable measured later, when the selected child was much older (or different from the
child chosen in 1975) did not affect the results; they were same when only the 1975 measure was used.
[6] Of course, it would be better to have a mental ability measure for the child, rather than the parent, but such
a measure is unavailable.

that transition, above the linear effect of their parent's educational attainment (Mare and Chang 1998). This possibility does not exist for the first transition for the children, High School Completion, because all of the respondents in this sample by definition completed high school. For the other transitions, however, a dummy variable indicating whether the respondent-parent completed the transition is included.

The strong possibility exists that even these basic variables (age, parental education) do not affect children's educational outcomes independent of gender of parent or of child. Thus, a series of interaction variables was created, allowing for additional effects of sex of child interacted with each variable, sex of respondent interacted with each variable, and mother/daughter pair (sex of respondent*sex of child) interacted with each variable. As an example, for the linear effect of respondent-parent's education, the following variables are included:

- REDYR75 = Total linear effect of respondent-parent's education
- EDYRi = Additional linear effect of mother's education
- EDYRk = Additional linear effect of respondent-parent's education when child is daughter
- EDYRmd = Additional linear effect of mother's education when child is daughter

These interaction variables are not all included in each model. Rather, preliminary logistic regressions were run without the GEE techniques to adjust standard errors, and only interactions that were of even marginal significance in the final models with the forward-selection technique were retained[7]. In Tables 3a-3d, these interactions are included in each model going forward whether significant or not. The "floor" effects of parental education were also selected in this manner; that is, they were interacted with the sex of

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[7] Backward selection was also used for the selection of interaction effects, and the results are similar.

parent/sex of child variables, and any significant variables found in the unadjusted logistic regressions were retained for the GEE analysis.

The second set of variables include the measure of the respondent-parent's educational aspirations, and the interaction of this variable with the sex of child, sex of respondent, and mother-daughter pair as indicated above. Furthermore, additional interaction effects of these aspirations are tested. To ascertain whether an additional increase in the log-odds of an educational transition for a child occurs for parents who had college aspirations but did not achieve them, I allow for two kinds of "unattained educational aspirations." The first occurs when parents planned on attending college, but never attended by 1975. The other occurs when parents planned on attending college after high school and did attend, but did not complete college. These two different kinds of "unattained aspirations" are considered because they might have different effects for children, particularly by gender of respondent.

Finally, it was mentioned above that the educational plans of the WLS respondents were measured both in 1957, when the respondents were in the spring of their senior year of high school, and again in 1975 when they were 36 years old and asked to "think back" and indicated whether they had planned to attend college. Although in preliminary analysis the models were run using both versions of this variable, the 1975 retrospective measure showed stronger and more significant results, and therefore these are the results presented here[8]. I have three reasons for preferring this retrospective measure. First, the question in 1957 was asked in such a way that those who planned to do anything else before they planned to attend college (work on the family farm, enter the military) would

not have been coded as having "college aspirations," even if they really did plan to attend

college sometime in the future. This is less of a problem with the 1975 measure, which

asks only "did you plan to attend college." Second, respondents who say that they had

wanted to attend college at age 36, 18 years after their high school graduation, probably

had a less-transitory interest in attending college than a high school senior who is still

unsure about what they wanted. That is, these recalled aspirations might be more highly

correlated with a general "value for education" that is more likely to affect their children.

Finally, this retrospective question is nice because it can be asked on any survey to

replicate these results; one needn't have only a measure of aspiration from a respondent's

youth to gain value from a retrospective question on educational goals in youth.

An additional measure of aspirations is used in the selected child sample, where a

measure of the respondent-parent's aspirations for the selected child's education is

available. Two measures of these aspirations for the selected child were constructed: (1)

the respondent-parent wanted the selected child to at least attend college, and (2) the

respondent-parent wanted the selected child to at least graduate college. These variables

are used as dependent variables to investigate whether the parent's own aspirations have

an effect on their goals for a randomly selected child; they are then used as independent

variables in models of the selected child's educational transitions.

The final set of variables measure family background. The WLS contains rich data

on the lives of its respondents—the parents in my analysis. From previous work, we know

that many of these family characteristics have a large influence on the educational

outcomes of children (Sewell et. al. 1969; Sewell et. al. 1970; Sewell and Hauser 1975). I

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[8] The results using the 1957 measure are available from the author upon request.

use a large number of these variables to control for the family background of children, in

order to ascertain whether parents' educational aspirations are having an effect on their

children's educational outcomes, regardless of family background. In addition to

respondent-parent's educational attainment (mentioned above), I control for: whether the

respondent-parent has ever had a marital disruption or has never married[9]; whether the

respondent-parent worked in a farming occupation in 1975[10]; the number of siblings the

child has (calculated as the respondent-parent's total number of children, minus one); the

respondent-parent's occupational status in 1975 (Occupational Education Score[11]), and the

logged household income in 1975 (where unavailable, I use household income in

1992/93). For the analysis of the selected children's educational attainment, I add the

educational attainment and occupational education score of the spouse-parent as additional

family background controls. Refer to Table 2 for the means and standard deviations of all

background variables, calculated for all children and selected children.

The inclusion of information on the spouse-parent of the selected child was a

complicated process. In the majority of cases, this spouse is the father or mother of the

selected child, as over 70 percent of the WLS respondents are currently married and have

been married only once. However, for a large minority of cases the WLS respondent had

more than one spouse, or had a premarital birth. Education and occupation of the spouse

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[9] This measure is a proxy for the *children* experiencing a non-intact family. Because each child in the sibship could have experienced the non-intactness of the family to different degrees, and because it is difficult to ascertain exactly who the spouse-parent of each child is, I use this as a shortcut to indicate non-intact family. For the analyses using only randomly-selected children, I use a measure corresponding directly to the situation for that selected child.

[10] For the analysis of selected children, whether either parent worked in a farming occupation indicates *Farm Background*.

[11] Occupational Education is the percent of persons in each occupation category in the 1970 Census who completed one or more years of college. This percentage has been transformed into a started logit in order to make its distribution more normal (Hauser and Warren 1997).

that was identified as most likely to be the selected child's biological parent (or the spouse married to the respondent-parent the longest during the selected child's childhood) was used in the selected-child samples. Because data were only collected for the first spouse, 1975 current spouse, and 1992/93 current spouse, however, there are a great deal of missing data for spouse-parent variables, particularly for occupation. In all cases with missing occupation data, the mean value for the variable was assigned to the observation, and a dummy variable was added to indicate the value was imputed. In a few cases, having a mother with missing occupation data resulted in a statistically-significant coefficient; that is, if mom did not engage in paid labor, this had an effect on the log-odds of a child making an educational transition—usually a negative effect. These missing data coefficients are only reported when they are significant in Tables 3-5.

Results

The results of the two sets of analyses are reported in Tables 3 through 5. Tables 3a-3d show the results using the educational attainments of *all* children as the sample, while Tables 4 and 5 show selected results from the analysis of the selected-child sample (which includes additional information about the spouse-parent as well as the respondent-parent's aspirations for the selected child in the analysis.) Coefficients in **bold** typeface are significant at the .001 level. This low *p*-level is probably the most appropriate given the very large sample size of all children of the WLS respondents (N = 19,736). Coefficients in *italics* are significant at the .05>*p*>.001 level. While these coefficients are showing significant effects at the traditional cutoff levels, the actual existence of these effects in such large samples is less certain. The coefficients have not been exponentiated

in the tables to save space; to calculate the increase (or decrease) in the log-odds of making a transition, simply calculate $\exp(\beta_{jk})$, where β_{jk} is the coefficient of interest.

High School Completion

Table 3a shows the results of the log-odds of completing high school for the WLS children. Each year over age 20 increases the log-odds of completing high school by five percent, and being a female increases the log-odds by 82 percent. The log-odds increase significantly (30 percent) for each year of education the child's respondent-parent completes. The respondent-parent's mental ability significantly affects his or her child's odds of graduating high school also; for every 10-point increase in Henmon-Nelson score, the odds of completing high school are increased by 12 percent for the child.

In column 2 the significant effects of a parent's having college aspirations on the odds his or her child will complete high school are seen. At every level of parent's education, the log-odds of a child completing high school increase by 14 percent if the parent indicated that they had planned to attend college when they were young. Note that this effect is almost as strong as one year of parental education; that is, children of parents who wanted to attend college but have only a high school diploma have about the same odds of graduating high school as children of parents who attended one year of college!

When the interaction variables are added to the model, an important distinction is made in whose college aspirations matter to the completion of high school of the children. Specifically, mothers' unattained aspirations had a different effect on their children's high school completion than did the fathers'. If the mothers wanted to attend college but never did, then the fact that they had college aspirations made little difference to the high school completion of their children (the negative effect of this coefficient is almost exactly

opposite the main effect for respondent-parent's college aspirations, indicating that the aspiration effect for respondent-parents who only completed high school is for children of male respondents only.) Controlling family background (Column 3) reduces these effects, but all are still at least marginally significant in the full model.

Figure 1 shows the increase in the log-odds of High School Completion for the children of the WLS respondents, for each level of the respondent-parent's education in combination with the parent's college plans (from column 4 of Table 3a). All other variables (child's age over 20, respondent's mental ability, respondent's occupational education score, number of sibings, and family income in 1975) are evaluated at their mean for each of the four groups (Father/Son, Father/Daughter, Mother/Son, and Mother/Daughter). The large log-odds scale on the y-axis shows that almost all of the children graduate from high school. For parents who never attended college (NOASP/HS and ASP/HS), the increase in log-odds of High School Completion for children of fathers can be seen for fathers with college aspirations who never attended college, but the same increase is not seen for the children of mothers with unmet aspirations. Within all other parental education levels, however, there is an increase in the odds of a child Graduating High School if the parent had aspirations for college. Note that the log-odds for those with the aspirations is actually *higher* than for those with no aspirations, but who managed to complete the next transition. For example, the log-odds of High School completion for sons of fathers who had aspirations but never attended college, ASP/HS, is higher than those for the sons of fathers who did attend college, but did not have plans to attend college—NOASP/ATT.

College Attendance

Examining the log-odds of College Attendance in Table 3b, some of the same effects present for the High School Graduation transition are evident. Again, daughters have 28 percent higher odds of making this transition than do sons, and an increase of 10 points on the Henmon-Nelson Test of Mental Ability for the respondent-parent corresponds to a 14 percent increase in the odds of a child completing this transition. Each year of a respondent-parent's education increases the log-odds of the child attending college by about 30 percent; the same factor as the increase in log-odds for high school graduation. A stronger effect of mental ability is present for mothers; their children have an additional seven percent increase in the log-odds of attending college for a 10 point increase in their mother's mental ability.

Some interesting difference in the two transitions emerge in Column 1, however. First, older children are *less* likely to Attend College than are younger children, probably indicating the general increase in educational attainment in society as a whole over the lives of these children. The positive interaction between sex of respondent and child's years over age 20, however, indicates that this disadvantage of age exists only for the children of the men in this sample. Because the men in this sample tended to not only have fewer children than their female classmates, but also tended to have children a bit later in their lives, the older children of fathers may have come from more disadvantaged background, and had fathers with less educational attainment. However, the marginal significance of this effect does not diminish when family background is controlled.

Evidence that the educational transitions of parents create a "floor" upon which their children's attainment is based is evident in Table 3b. Note the additional positive

effect of having a respondent-parent who at least attended college on the log-odds of College Attendance for the children. In addition to the 30 percent increase in log-odds of attending college for every year of education their parents obtained, the children of parents who ever attended college have an *additional* increase in the odds of Attending College of 67 percent. Finally, a special connection between mothers and daughters is seen here. If a female respondent-parent ever attended college, this increases the odds of a daughter Attending College even more (28 percent).

In Column 2, the effects of a respondent-parent's plans to attend college are highly significant predictors of the log-odds of children's College Attendance. At every level of parental education, the log-odds of a child's College Attendance is increased 34 percent if the respondent-parent had college aspirations. Adding this aspiration variable to the model reduces the effects of the parent-respondent's actual educational attainment so that having these aspirations is worth about one year of education in increasing the log-odds of a child's college attendance. The additional "floor" effect of parents' college attendance is reduced, but is not eliminated.

Some marginally-significant interaction effects appear when the respondent-parents' educational aspirations are considered (Column 3), which clarify the way these aspirations are acting on the log-odds of children's College Attendance because the very significant effect of these aspirations disappears when the interactions are added to the model. First, for all children who had a respondent-parent who never attended college even though they had wanted to while in high school, the log-odds of College Attendance increase by about 38 percent. For those parents who wanted to attend college and did, but dropped out before graduating, the effect is different for daughters than for sons, and is

different for daughters of fathers than it is for daughters of mothers. For daughters of fathers who had college aspirations but never completed college, the log-odds of College Attendance are actually *lower* than other groups; these daughters have 36 percent lower odds of Attending College, a surprising finding. If the parent with college aspirations who dropped out is the mother, then the daughter's log-odds of College Attendance is significantly increased, in about the same proportion as the significant decrease for daughters of fathers—about 65 percent. When the family background variables are introduced into the model (Column 4), all of these effects are reduced, but remain at least marginally significant, although the effect for mothers and daughters becomes even stronger.

To better understand how these interactions describe the relationship between parents' aspirations and education, and their children's College Attendance, Figure 2 illustrates the patterns for each of the four types of sex-pairs (father-son, father-daughter, mother-son, mother-daughter) of the log-odds of College Attendance, when all other effects in the model are evaluated at the variable's mean. The sudden drop in log-odds of College Attendance for daughters of WLS fathers who had wanted to attend college as high school seniors but never graduated college is clearly visible; otherwise an orderly pattern of parent's aspirations leading to increased odds of children's College Attendance is clear, with a little extra increase for the daughters in the analysis, especially daughters of female WLS respondents. Unlike in Figure 1, having college aspirations does not compensate for actually getting the education. Children of respondents who have unmet college aspirations do not have increased odds of Attending College, compared to the children of respondents who met their aspirations.

Evaluating the effects of parents' college aspirations on the College Completion of their children is also an interesting exercise in interpreting the effects of many different interactions between sex of respondent, sex of child, respondent's educational level, and other variables of interest. The results of this analysis are reported in Table 3c, and the first thing to note is that this sample has been truncated to those children aged 25 and older, so that each child has theoretically had enough time to experience this transition. Unlike the previous transitions, we see that daughters are no more likely to graduate college than the sons. As with the earlier transitions, however, the respondent-parent's mental ability and years of educational attainment both appear to significantly affect the log-odds of their children's College Graduation, although the effects of one year of education appear to be smaller than in the previous transition by about half—a 15 percent increase in log-odds, compared to 30 percent in Tables 3a and 3b. The age of the son has a small positive effect on the log-odds of College Completion, but for daughters this effect is reduced so that age makes little difference to the log-odds of College Completion for them. The educational "floor" effect does not seem to operate here for males, but it does for females. Children (both sons and daughters) of mothers with a bachelor's degree have an increased odds of Graduating College (about 32 percent), and daughters (of both mothers and fathers) have an increased odds of Graduating College of almost the same amount—about 28 percent. Because the interaction of respondent-parent's education with mother-daughter pair is not significant (not shown), the effects for daughters of mothers are added, and they have about a 70 percent increase in the log-odds of College

Graduation, given that they Attended College ($\exp(0.28 + 0.25) = 1.70$), compared to other pair-types.

Respondent-parent's retrospective reports of college aspirations have about the same effect on College Graduation as they have for the previous two transitions (that is, equal to about one year of education), although the results are only significant at the $p<.05$ level. As in the other transition models, this effect does not disappear when other family background factors are controlled, although mothers no longer set the educational "floor" for their children if they have completed college when their occupational standing and family income are considered. Daughters of parents with a college degree still have significantly higher log-odds of Completing College compared to sons, however, and this effect is slightly increased when mother's occupation (a significant effect itself on children's College Completion odds) is considered.

Figure 3 illustrates the log-odds of Completing College for the four sex-composition pairs of respondent-parents and their children, with the effects of all variables except gender, respondent-parent's education, and respondent-parent's aspirations evaluated at the mean. The slight advantage for children whose parents held college aspirations can be seen within each parent's education level, and the "floor" effects for daughters (and, to a lesser extent, the sons of mothers) can also be seen. Clearly, the biggest part of the story for determining whether the children will Graduate College is whether the parent (particularly the mother) attended college, at least for the daughters in this sample.

Graduate School

Table 3d displays the results of models predicting the log-odds of children's Graduate School Attendance. For the first time, daughters are significantly less likely to make this transition, given that they graduated college, than are sons, particularly in the full model. As with the College Graduation transition, the older the son, the higher the log-odds of Attending Graduate School. There is little effect of age over 25 for the daughters as the interaction term combined with the main effect makes this variable equal approximately zero ($0.10 + -0.05 = 0.05$ for all daughters). Respondent's mental ability continues to have an effect even at this high level of education attainment, although it is not nearly as strong as in previous transitions (about 6 percent increase in log-odds, compared to about 12 percent for the other transitions), and becomes insignificant as other variables are entered into the model. Finally, the linear effect of educational attainment is still highly significant, but is only about as strong as the effect for College Graduation— about 13 percent higher log-odds of Attending Graduate School for each year of education of the parent. There do not appear to be any "floor" effects for graduate school; dummy variables indicating that the respondent-parent attended graduate school were not significant predictors of the children's Graduate School Attendance, above the linear effects of education.

When the parents' college aspirations are added to the model, the main effects are insignificant. What *is* significant is the interaction term indicating that if the mother had college aspirations, then the child has significantly higher odds of Attending Graduate School. If mother had these aspirations and attended college (but never completed), then her child has additional increased log-odds of Attending Graduate School, but this effect

seems to be true only for sons, as the daughters of mothers in this category (unattained college aspirations due to college dropout) actually have lower log-odds of Graduate School Attendance. The addition of the family background variables change these results minimally; in fact, unlike previous transitions none of these background factors affect the log-odds of a child entering Graduate School. Once family background factors are controlled, the daughters of mothers with unattained aspirations are even worse off, because the positive effect of these unattained aspirations becomes non-significant.

Figure 4 graphs the log-odds of a child's Graduate School Attendance for different levels of parent's education and college aspirations (again, with all other variables evaluated at their mean.) The lower log-odds for daughters is seen, and the unique increase to the log-odds of sons' Graduate School Attendance for mothers who wanted to attend college and never attended is clear. Children of fathers with aspirations appear to be at a disadvantage at every level of education, but this negative coefficient is not significant in Table 3d, column 4.

Examining the process—Parents' Aspirations for their Children

It would seem likely that the pathway through which parents realize through their children their unattained college aspirations is through their aspirations for their children. Parents who wanted to go to college but never went might have higher educational aspirations for their children than other parents with the same levels of education who never wanted to attend college. Using the questions asked of respondent-parents regarding their educational goals *for a randomly selected child*, I perform two analyses to investigate

this hypothesis[12]. First, I look at the log-odds of a respondent-parent wanting the selected child to at least Attend College (vs. wanting the selected child to only Graduate High School or "Whatever He or She Wants"). The results in Table 4a show that if the respondent-parent planned to attend college, the log-odds of the parent wanting his or her selected child to at least Attend College is increased 39 percent (column 2). When the interaction variable of unattained aspirations is added (parent wanted to attend college but never attended), the main effect becomes insignificant and is replaced by the effect of the unattained aspirations (column 3). Interestingly, when family background variables are controlled (column 4), the effect of a parent's unattained college aspirations on the log-odds of the parent wanting his or her child to attend college *increase*; such a parent is about 58 percent more likely to want his or her child to at least attend college, compared to other parents.

In Table 4b, the same sort of analysis is performed, but the dependent variable is the log-odds of a parent wanting his or her selected child to at least *graduate* college. Again, the log-odds of a respondent-parent wanting at least a bachelor's degree for his or her selected child is increased if the respondent-parent wanted to attend college him- or herself. When the interaction variables indicating unattained college aspirations are added to the model, the main effect of the aspirations disappears, and the unattained aspirations themselves become the important factor in increasing the log-odds of having high educational aspirations for one's selected child. For respondent-parents who wanted to attend college when they were young, but either never attended or attended but didn't

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[12] Due to the smaller sample size than the one including all of the respondent-parent's children, all of the possible sex of respondent by sex of selected child interactions with each of the variables in the model are not included in these models.

graduate, the log-odds of wanting a randomly-selected child to at least graduate college are increased 39%. When family background variables are controlled, this effect decreases a bit and just misses the $p<.05$ cutoff for significance.

When the educational attainment of the randomly-selected children is modeled as in Tables 3a-3d above, only the College Attendance transition shows any significant effects of parents' own aspirations once the family background variables are controlled. This lack of significant findings for the High School Graduation, College Completion, and Graduate School Attendance transitions may be due to the smaller sample size, or because of the higher percentage of persons from smaller families (because people from smaller sibships already have an educational advantage over people from larger sibships). The transition to College Attendance is an important one, however. Family background factors have more influence on making this transition than on any of the other transitions modeled (Mare 1980), because almost everyone graduates from high school regardless of family background, and once in college, the ability to complete college and perhaps pursue even further educational attainment is more dependent on the child's own goals, interests and abilities than it is on the family background factors that got him or her into college in the first place.

In Table 5, I present the results of a logistic regression which investigates whether the effects of unattained college aspirations on a child's log-odds of Attending College are mediated by the parent's aspirations for the selected child's education. Only the full models, with family background factors controlled, are presented. In Column 1, the marginally significant effect of a respondent-parent's unrealized aspirations to attend college on the log-odds of the selected child's College Attendance is seen. This

coefficient is approximately the same magnitude as that from Table 3d, when all of the respondent-parents' children were included in the sample. When the dummy variable indicating whether the respondent-parent wanted this selected child to at least attend college is added to the model (Column 2), the effect of the unrealized aspirations decreases somewhat, and just misses significance at the $p<.05$ level. In Column 3, the main effect of the respondent-parent's plans to attend college is removed, and the standard error of the unattained aspirations coefficient is correspondingly decreased so that the effect is now marginally significant.

This result is fascinating, because it suggests that when parents are not able to realize their plans to attend college, the increased propensity of their children to attend college occurs not only through the parent's stated goal for his or her child's education, but also through other mechanisms.

Discussion

The analyses presented above appear to confirm the conventional wisdom that parents realize their unattained educational goals through their children. Within each level of parents' education, almost every child's odds of completing a particular educational transition are increased if the parent had aspired to attend college when he or she was young. For most transitions, the strength of these effects are not as big as those for the educational attainment of the parents. That is, within a parent's educational level there is an advantage for children of parents who had aspired to attend college, but there is an even bigger advantage for children whose parents actually completed the next education level, regardless of college ambitions. An exception to this is found in the High School Graduation transition, where the effects of the aspirations actually eclipse those of

education, so that the child of a parent who, for example, aspired to attend college and attended, but never graduated, has higher odds of Completing High School than the child of a parent who completed college, but never planned to attend while young (see Figure 1).

These results do differ in some cases by gender of parent, and gender of child. In general, daughters tend to have higher odds of making any educational transition except that to Graduate School than do sons, and children of the WLS mothers tend to do better than children of the WLS fathers. The *additional* effects of unattained aspirations appear to affect the odds of High School Graduation only for fathers who never attended college, but planned to. Daughters of fathers who wanted to attend college when they were young and attended but never graduated have significantly *lower* odds of Attending College than sons of fathers with this kind of unattained aspiration, or any child of mothers with this kind of unattained aspiration. This raises the possibility that fathers who dropped out of college might actually impede their daughters from attending, for whatever reason—a result that bears further scrutiny. Finally, sons of mothers who never attended college even though they had planned to in high school had increased odds of Attending Graduate School (given that they Graduated College). In this case, mothers appear to be pushing their *sons* to attain more education—not their daughters.

The ties between mothers and daughters were more clearly seen in the additional effects of educational "floors" that mothers set for their daughters, particularly for the College Attendance and College Graduation transitions. Regardless of the mother's own ambitions for herself, mothers who attained these levels of education for themselves appear to push their daughters a bit harder to at least attain that same level of attainment.

The way that parents aspirations for themselves appear to influence their children's educational outcomes is through the parent's stated goals for a child's educational attainment. Parents were more likely to want their children to both attend college, and graduate college, if they had unattained college ambitions from their own youth. Although having these high educational goals for their children did significantly increase the odds of a child Attending College, the effects of the unattained ambitions were not completely mediated; a direct effect of unattained aspirations still affected a child's log-odds of Attending College, even when the desire of the parent for the child to attend college was controlled. This suggests that these unattained college ambitions are affecting the children's attainment through other mechanisms, such as social capital or family values for education—an interesting area for future study.

Conclusion

The world has changed a bit from when Kahl was observing his working-class subjects in Boston. It seems that fathers have less of an influence on their children than do mothers, and that the mother-daughter bond is particularly strong, at least when it comes to making sure that one's children go at least as far in school as one's parent. A parents' college aspirations increases the log-odds of children making the crucial transitions both to College Attendance and to College Graduation, within a parent's actual level of attainment. This finding is the basis for the notion that parents with unattained college ambitions push their children to obtain the college education that they did not. The presence of these statistically significant effects highlights the importance of having high educational aspirations in one's youth. Sewell and his colleagues found in the late 1960s that children with high aspirations for themselves tend to attain higher levels of education

and occupational standing in their early careers, and Sheridan (2000) has found that these effects last long into the life course. The findings from this study illustrate that the effects of early college aspirations last even into the next generation.

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Table 1. WLS Sample Selection (Respondents and Children)

	WLS MEN			WLS WOMEN		
	Number of Respondents	Number of Children	Mean # Children/R*	Number of Respondents	Number of Children	Mean # Children/R*
Original 1/3 Sample	4992			5325		
1992/93 Respondent	3981 79.7%	11346	2.85 (1.61)	4512 84.7%	13797	3.06 (1.77)
(1) All Children	3660 91.9%	11346 100.0%	3.10 (1.43)	4150 92.0%	13797 100.0%	3.32 (1.59)
(2) Biological/Adopted, Alive, Sex Not Missing, Education>8 years	3530 88.7%	9783 86.2%	2.77 (1.20)	4073 90.3%	12299 89.1%	3.02 (1.34)
(3) (2) and Age 20+	3421 85.9%	9097 80.2%	2.66 (1.16)	4029 89.3%	11798 85.5%	2.93 (1.27)
(4) (3) and Selected Child	3455 86.8%	3455 30.5%	1 (0)	4036 89.5%	4036 29.3%	1 (0)
(5) (2) and Age 25+	2946 74.0%	6710 59.1%	2.28 (1.05)	3799 84.2%	9822 71.2%	2.59 (1.12)
(6) (5) and High School Graduate or Higher	2913 73.2%	6488 57.2%	2.23 (1.03)	3774 83.6%	9465 68.6%	2.51 (1.10)
(7) (6) and Randomly Selected Child	2281 57.3%	2281 20.1%	1 (0)	3158 70.0%	3158 22.9%	1 (0)

* Differences in Mean Number of Children per Respondent between Male and Female WLS respondents are all statisitcally significant at at the $p < .01$ level.

Table 2. Descriptive Statistics*, All Children of WLS Respondents and Selected Children of WLS Respondents

| | WLS Male Respondents (Fathers) | | | |
| | Father-Son | | Father-Daughter | |
	All Kids**	Selected Kids***	All Kids**	Selected Kids***
N	4625	1797	4472	1658
Child's Educational Attainment				
Years	13.80 (2.16)	13.73 (2.18)	13.98 (2.04)	14.02 (2.06)
% Less than HS	4.3% (20.4%)	6.1% (23.9%)	2.6% (15.8%)	3.1% (17.3%)
% HS Graduate	36.7% (48.2%)	35.3% (47.8%)	33.7% (47.3%)	30.2% (45.9%)
% Attended College	29.9% (45.8%)	30.3% (46.0%)	31.1% (46.3%)	33.7% (48.3%)
% College Graduate	22.1% (41.5%)	21.1% (40.9%)	26.3% (44.0%)	26.5% (44.2%)
% Post-Bachelors Schooling	6.9% (25.4%)	7.1% (25.7%)	6.4% (24.5%)	6.5% (24.7%)
Respondent's (Parent's) Educational Attainment				
Years	13.67 (2.36)	13.85 (2.47)	13.67 (2.36)	13.80 (2.41)
% HS Graduate	54.1% (49.8%)	51.8% (50.0%)	54.2% (49.8%)	51.1% (50.0%)
% Attended College	19.0% (39.2%)	18.5% (38.8%)	18.6% (38.9%)	19.0% (39.2%)
% College Graduate	12.8% (33.4%)	13.3% (34.0%)	13.3% (34.0%)	14.4% (35.1%)
% Post-Bachelors Schooling	14.2% (34.9%)	16.4% (37.1%)	13.9% (34.6%)	15.5% (36.2%)
Respondent's (Parent's) Mental Ability	10.11 (1.46)	10.16 (1.47)	10.14 (1.43)	10.20 (1.44)
Respondent's (Parent's) Occupational Education Score in 1975	-0.68 (1.68)	-0.57 (1.71)	-0.69 (1.66)	-0.61 (1.66)
Respondent (Parent) is Farmer in 1975	4.7% (20.7%)	3.5% (17.8%)	4.7% (21.0%)	4.5% (20.7%)
Respondent (Parent) Marital Disruption by 1975	17.6% (38.1%)	18.7% (39.0%)	17.5% (39.0%)	17.0% (37.6%)
Respondent's (Parent's) Number of Children (-1)	2.61 (1.52)	2.14 (1.42)	2.66 (1.58)	2.15 (1.43)
Respondents' (Parents') Family Income in 1975	9.72 (0.47)	9.75 (0.48)	9.72 (0.48)	9.71 (0.48)
Respondent (Parent) Planned to Attend College in 1957	42.4% (49.4%)	45.0% (49.8%)	42.9% (49.5%)	43.8% (69.6%)
Respondent (Parent) Recalled Plans to Attend College After High School (1975)	37.6% (48.4%)	39.3% (48.9%)	37.8% (48.5%)	39.1% (48.8%)
Respondent's Spouse's Education				
Years		12.84 (1.88)		12.81 (1.82)
% Less than HS		7.6% (26.5%)		6.8% (25.2%)
% HS Graduate		59.7% (49.1%)		61.1% (48.8%)
% Attended College		14.2% (34.9%)		14.4% (35.1%)
% College Graduate		15.9% (36.5%)		15.4% (36.1%)
% Post-Bachelors Schooling		3.3% (18.0%)		2.7% (16.1%)
Respondent's Spouse's Occupational Education Score		-0.62 (1.43)		-0.66 (1.50)
Respondent and/or Spouse is Farmer		4.4% (20.5%)		5.2% (22.2%)
Respondent Not Married to Selected Child's Other Parent by 1992/93		19.7% (39.8%)		17.9% (38.4%)
Respondent's Aspirations for Selected Child's Education:				
Less Than High School		--- ---		0.1% (2.5%)
High School Graduate		17.1% (37.6%)		16.7% (37.3%)
Attend College		9.6% (29.5%)		14.5% (35.2%)
College Graduate		48.2% (50.0%)		46.5% (49.9%)
Graduate School		15.3% (36.0%)		10.8% (31.1%)
"Whatever Child Wants"		8.7% (28.2%)		10.3% (30.4%)
"Satisfied With Current Situation"		1.1% (10.4%)		1.1% (10.5%)

(Table 2 Continued on Next Page)

(Table 2 Continued From Previous Page)

	WLS Female Respondents (Mothers)			
	Mother-Son		Mother-Daughter	
	All Kids**	Selected Kids***	All Kids**	Selected Kids***
N	5997	2096	5801	1940
Child's Educational Attainment				
Years	13.78 (2.21)	13.87 (2.28)	13.93 (2.06)	13.96 (2.09)
% Less than HS	4.9% (21.6%)	5.5% (22.9%)	2.7% (16.3%)	3.0% (17.2%)
% HS Graduate	38.0% (48.5%)	34.4% (47.5%)	33.6% (47.3%)	32.1% (46.7%)
% Attended College	27.4% (44.6%)	28.8% (45.3%)	31.1% (46.3%)	32.5% (46.8%)
% College Graduate	21.9% (41.4%)	22.9% (42.1%)	25.4% (43.5%)	25.2% (43.4%)
% Post-Bachelors Schooling	7.8% (26.8%)	8.3% (27.6%)	7.1% (25.6%)	7.2% (25.9%)
Respondent's (Parent's) Educational Attainment				
Years	12.79 (1.53)	12.92 (1.67)	12.78 (1.53)	12.93 (1.64)
% HS Graduate	71.6% (45.1%)	69.4% (46.1%)	71.4% (45.2%)	67.2% (47.0%)
% Attended College	15.3% (36.0%)	14.6% (35.4%)	15.5% (36.2%)	17.1% (37.7%)
% College Graduate	10.3% (30.5%)	11.9% (32.4%)	10.3% (30.5%)	12.1% (32.6%)
% Post-Bachelors Schooling	2.9% (16.7%)	4.1% (19.8%)	2.7% (16.3%)	3.7% (18.8%)
Respondent's (Parent's) Mental Ability	10.14 (1.37)	10.2 (1.39)	10.15 (1.36)	10.22 (1.37)
Respondent's (Parent's) Occupational Education Score in 1975	-0.99 (1.33)	-0.87 (1.38)	-0.98 (1.33)	-0.87 (1.37)
Respondent (Parent) is Farmer in 1975	2.7% (15.1%)	2.3% (13.7%)	3.0% (15.8%)	2.0% (13.1%)
Respondent (Parent) Marital Disruption by 1975	15.5% (36.2%)	16.4% (37.0%)	14.9% (35.7%)	15.8% (36.5%)
Respondent's (Parent's) Number of Children (-1)	2.91 (1.73)	2.36 (1.57)	2.92 (1.71)	2.35 (1.61)
Respondents' (Parents') Family Income in 1975	9.57 (0.73)	9.57 (0.74)	9.55 (0.73)	9.57 (0.69)
Respondent (Parent) Planned to Attend College in 1957	28.4% (45.1%)	29.7% (45.7%)	28.7% (45.2%)	32.7% (46.9%)
Respondent (Parent) Recalled Plans to Attend College After High School (1975)	33.6% (47.3%)	35.9% (48.0%)	33.9% (47.3%)	36.8% (48.3%)
Respondent's Spouse's Education				
Years		13.31 (2.79)		13.24 (2.82)
% Less than HS		11.8% (32.3%)		12.7% (33.3%)
% HS Graduate		46.3% (49.9%)		47.7% (50.0%)
% Attended College		14.1% (34.8%)		12.7% (33.3%)
% College Graduate		24.5% (43.0%)		23.8% (42.6%)
% Post-Bachelors Schooling		12.0% (32.5%)		12.2% (32.8%)
Respondent's Spouse's Occupational Education Score		-0.73 (1.70)		-0.73 (1.77)
Respondent and/or Spouse is Farmer		4.7% (21.2%)		4.7% (21.1%)
Respondent Not Married to Selected Child's Other Parent by 1992/93		20.5% (40.4%)		20.2% (40.2%)
Respondent's Aspirations for Selected Child's Education:				
Less Than High School		--- ---		--- ---
High School Graduate		20.8% (40.6%)		21.3% (40.9%)
Attend College		11.9% (32.4%)		14.7% (35.5%)
College Graduate		44.3% (49.7%)		44.6% (49.7%)
Graduate School		14.1% (34.8%)		10.5% (30.6%)
"Whatever Child Wants"		8.1% (27.2%)		8.2% (27.5%)
"Satisfied With Current Situation"		0.9% (9.3%)		0.7% (8.6%)

* Numbers in parentheses are standard deviations.

** Children of WLS respondents are biological or adopted children, alive at the 1992/93 interview, not missing on sex of child, are at least age 20, and have completed at least 9 years of school (Sample 3 from Table 1).

*** Children of WLS respondents are biological or adopted children, alive at the 1992/93 interview, not missing on sex of child, are at least age 20, have completed at least 9 years of school, and are the randomly selected child (Sample 4 from Table 1).

Table 3a. Log-Odds of High School Completion of WLS Children*

	Estimate	Standard Error**	Estimate	Standard Error**	Estimate	Standard Error**	Estimate	Standard Error**
Intercept	-1.87	(0.60)	-1.15	(0.63)	-0.64	(0.61)	-0.13	(0.92)
Child's Age Over 20	**0.05**	**(0.01)**	**0.05**	**(0.01)**	**0.05**	**(0.01)**	**0.05**	**(0.01)**
Daughter	**0.60**	**(0.08)**	**0.61**	**(0.08)**	**0.60**	**(0.08)**	**0.58**	**(0.08)**
Mother	-1.25	(0.71)	-1.02	(0.73)	-1.02	(0.74)	-0.96	(0.73)
R's Mental Ability	*0.11*	*(0.05)*	*0.11*	*(0.06)*	0.11	(0.06)	0.08	(0.06)
Mother's Mental Ability	0.13	(0.07)	0.11	(0.07)	(0.11)	(0.08)	0.10	(0.07)
R's Years of Education	**0.26**	**(0.03)**	**0.21**	**(0.04)**	**0.16**	**(0.04)**	0.05	(0.05)
R's Retrospective College Plans			*0.13*	*(0.05)*	**0.53**	**(0.15)**	*0.46*	*(0.16)*
Mother had College Aspirations *But Never Attended*					*-(0.59)*	*(0.24)*	*-0.56*	*(0.25)*
R's Occupational Education Score							**0.22**	**(0.05)**
R a Farmer							0.54	(0.32)
R has Non-Intact First Marriage							**-0.84**	**(0.11)**
Number of Siblings (of Child)							-0.05	(0.03)
Family Income in 1975							*0.19*	*(0.06)*
-2 Log Likelihood	6173.49		5638.33		5628.53		5088.09	
df	6		7		8		13	
α_1	**2.12**	**(0.13)**	**1.95**	**(0.12)**	**1.93**	**(0.12)**	**1.71**	**(0.13)**

*BOLD < .001, *ITALICS <.05; Labels in italics are interaction effects.*

** Standard Errors are adjusted for sibling clusters using GEE methodology in SAS.

Table 3b. Log-Odds of College Attendance of WLS Children*

	Estimate	Standard Error**	Estimate	Standard Error**	Estimate	Standard Error**	Estimate	Standard Error**
Intercept	**-4.12**	**(0.31)**	**3.98**	**(0.33)**	**-3.96**	**(0.34)**	**-5.83**	**(0.76)**
Child's Age Over 20	**-0.05**	**(0.01)**	**-0.05**	**(0.01)**	**-0.05**	**(0.01)**	**-0.05**	**(0.01)**
Child's Years Over 20 for Mothers Only	*0.02*	*(0.01)*	*0.03*	*(0.01)*	*0.02*	*(0.01)*	*0.02*	*(0.01)*
Daughter	**0.25**	**(0.03)**	**0.25**	**(0.03)**	**0.28**	**(0.03)**	**0.32**	**(0.04)**
Mother	-0.62	(0.32)	-0.62	(0.33)	-0.57	(0.33)	*1.92*	*(0.84)*
R's Mental Ability	**0.13**	**(0.02)**	**0.12**	**(0.03)**	**0.13**	**(0.03)**	**0.10**	**(0.03)**
Mother's Mental Ability	*0.07*	*(0.03)*	*0.07*	*(0.03)*	*0.06*	*(0.03)*	0.05	(0.03)
R's Years of Education	**0.26**	**(0.02)**	**0.25**	**(0.02)**	**0.25**	**(0.02)**	**0.14**	**(0.02)**
R Attended College ("Floor")	**0.51**	**(0.07)**	**0.37**	**(0.08)**	**0.56**	**(0.09)**	**0.57**	**(0.10)**
Mother Attended College & Child is Daughter ("Floor")	*0.25*	*(0.09)*	*0.23*	*(0.10)*	*0.17*	*(0.13)*	0.08	(0.14)
R's Retrospective College Plans			**0.29**	**(0.06)**	0.13	(0.09)	0.10	(0.10)
Parent Wanted to Attend College But Never Attended					*0.32*	*(0.12)*	*0.29*	*(0.13)*
Parent Wanted to Attend College and Attended, But Never Graduated & Child is Daughter					**-0.45**	**(0.14)**	**-0.48**	**(0.14)**
Mother Wanted to Attend College and Attended, But Never Graduated & Child is Daughter					*0.50*	*(0.21)*	*0.60*	*(0.22)*
R's Occupational Education Score							**0.19**	**(0.02)**
Mother's Occupation & Child is Daughter							0.07	(0.03)
R a Farmer							0.03	(0.13)
R has Non-Intact First Marriage							**-0.45**	**(0.07)**
Mother Had Non-Intact First Marriage & Child is Daughter							*0.28*	*(0.11)*
Number of Siblings (of Child)							**-0.09**	**(0.01)**
Family Income in 1975							**0.43**	**(0.07)**
Mother Reported Family Income							*-0.25*	*(0.08)*
-2 Log Likelihood	23201.6		21852.6		21821.6		19661.2	
df	9		10		13		21	
α_1	**1.34**	**(0.05)**	**1.32**	**(0.05)**	**1.32**	**(0.05)**	**1.21**	**(0.05)**

*BOLD < .001, *ITALICS <.05; Labels in italics are interaction effects.*
** Standard Errors are adjusted for sibling clusters using GEE methodology in SAS.

Table 3c. Log-Odds of College Completion of WLS Children*

	Estimate	Standard Error**	Estimate	Standard Error**	Estimate	Standard Error**
Intercept	**-2.72**	**(0.28)**	*-(2.43)*	**(0.30)**	**-5.39**	**(0.92)**
Daughter	0.00	(0.01)	*(0.01)*	*(0.04)*	0.01	(0.01)
Child's Age Over 25	*0.18*	*(0.09)*	*(0.19)*	*(0.09)*	0.16	(0.10)
Number of Years Daughter is Older Than 25	*-0.05*	*(0.02)*	**-(0.05)**	**(0.02)**	*-0.05*	*(0.02)*
Mother	0.02	(0.06)	*(0.01)*	*(0.06)*	1.43	(0.99)
R's Mental Ability	**0.10**	**(0.02)**	**(0.10)**	**(0.02)**	**0.09**	**(0.02)**
R's Years of Education	**0.14**	**(0.02)**	**(0.12)**	**(0.02)**	**0.10**	**(0.03)**
Mother has Bachelor's Degree ("Floor")	*0.28*	*(0.11)*	*0.27*	*(0.11)*	*0.10*	*(0.14)*
R has Bachelor's Degree & Child is Daughter ("Floor")	*0.25*	*(0.10)*	*0.28*	*(0.11)*	*0.31*	*(0.11)*
R's Retrospective College Plans			*0.18*	*(0.06)*	*0.15*	*(0.06)*
R's Occupational Education Score					-0.02	(0.03)
Mother's Occupation					*0.10*	*(0.05)*
R a Farmer					-0.01	(0.17)
R has Non-Intact First Marriage					**-0.33**	**(0.08)**
Number of Siblings (of Child)					**-0.06**	**(0.02)**
Family Income in 1975					**0.36**	**(0.09)**
Mother Reported Family Income					-0.13	(0.10)
-2 Log Likelihood	12371.8		11748.3		10737.2	
df	8		9		16	
α_1	**1.05**	**(0.07)**	**1.03**	**(0.07)**	**0.98**	**(0.07)**

*BOLD < .001; *ITAL < .05; Labels in italics are interaction effects.*

** Standard Errors are adjusted for sibling clusters using GEE methodology in SAS.

Table 3d. Log-Odds of Graduate School for WLS Children*

	Estimate	Standard Error**	Estimate	Standard Error**	Estimate	Standard Error**	Estimate	Standard Error**
Intercept	**-3.86**	**(0.33)**	**-3.84**	**(0.36)**	**-3.80**	**(0.38)**	*-2.61*	*(0.83)*
Child's Age Over 25	**0.10**	**(0.02)**	**0.10**	**(0.02)**	**0.10**	**(0.02)**	**0.11**	**(0.02)**
Number of Years Daughter is Over Age 25	-0.05	(0.03)	-0.05	(0.03)	-0.05	(0.03)	*-0.07*	*(0.03)*
Number of Years Daughter is Over Age 25 for Mothers Only	0.02	(0.02)	0.03	(0.02)	0.04	(0.02)	0.04	(0.02)
Daughter	-0.05	(0.12)	-0.08	(0.13)	-0.04	(0.13)	*-2.52*	*(1.13)*
Mother	0.11	(0.09)	0.07	(0.09)	-0.17	(0.12)	-0.13	(0.13)
R's Mental Ability	*0.06*	*(0.03)*	0.05	(0.03)	0.06	(0.03)	0.05	(0.03)
R's Years of Education	**0.12**	**(0.02)**	**0.12**	**(0.02)**	**0.13**	**(0.02)**	**0.14**	**(0.03)**
R's Retrospective College Plans			0.05	(0.08)	-0.17	(0.12)	-0.19	(0.13)
Mother Had College Aspirations					*0.36*	*(0.14)*	*0.35*	*(0.15)*
Mother Had College Aspirations But Never Attended College					*0.49*	*(0.21)*	0.41	(0.21)
Mother Had College Aspirations But Never Attended College & Child is Daughter					**-1.21**	**(0.34)**	*-1.00*	*(0.33)*
R's Occupational Education Score							-0.03	(0.03)
R a Farmer							0.01	(0.27)
R has Non-Intact First Marriage							-0.03	(0.11)
Number of Siblings (of Child)							-0.05	(0.02)
Family Income in 1975							-0.12	(0.07)
Family Income for Daughters Only							*0.26*	*(0.11)*
-2 Log Likelihood	6042.62		5721.11		5696.97		5286.18	
df	7		8		11		17	
α_1	**0.66**	**(0.11)**	**(0.67)**	**(0.11)**	**0.66**	**(0.11)**	**0.62**	**(0.12)**

BOLD < .001; *ITAL < .05; Labels in italics are interaction effects.*
** Standard Errors are adjusted for sibling clusters using GEE methodology in SAS.

Table 4a. Log-Odds of WLS Respondent-Parent Wanting Selected Child to Attend College (Or More)*

	Estimate	Standard Error	Estimate	Standard Error	Estimate	Standard Error	Estimate	Standard Error
Intercept	**-2.75**	**(0.31)**	**-2.37**	**(0.35)**	**-2.70**	**(0.42)**	**-2.44**	**(0.68)**
Child's Age Over 20	*-0.02*	*(0.01)*	-0.01	(0.01)	-0.01	(0.01)	-0.01	(0.01)
Daughter	-0.06	(0.06)	-0.05	(0.06)	-0.05	(0.06)	-0.06	(0.06)
Mother	-0.03	(0.06)	-0.05	(0.06)	-0.06	(0.06)	-0.06	(0.07)
R's Mental Ability	**0.08**	**(0.02)**	**0.07**	**(0.02)**	**0.07**	**(0.02)**	0.04	(0.02)
Mother's Education	**0.10**	**(0.02)**	**0.09**	**(0.02)**	**0.10**	**(0.03)**	0.05	(0.03)
Mother Attended College ("Floor")	*0.21*	*(0.09)*	0.09	(0.09)	0.15	(0.11)	0.17	(0.11)
Father's Education	**0.13**	**(0.01)**	**0.12**	**(0.02)**	**0.13**	**(0.02)**	**0.08**	**(0.02)**
Father Attended College ("Floor")	**0.36**	**(0.08)**	**0.33**	**(0.09)**	**0.36**	**(0.09)**	*0.31*	*(0.10)*
R Planned to Attend College			**0.33**	**(0.08)**	0.19	(0.13)	0.07	(0.14)
Parent Has College Aspirations But Never Attended College					*0.35*	*(0.17)*	*0.46*	*(0.18)*
Parent Has College Aspirations And Attended College But Did Not Complete College					-0.01	(0.17)	0.09	(0.18)
Mother's Occupational Education							**0.15**	**(0.03)**
Father's Occupational Education							**0.10**	**(0.03)**
Parent a Farmer							*-0.27*	*(0.14)*
Selected Child from Non-Intact Family							0.10	(0.11)
Number of Siblings (of Child)							**-0.08**	**(0.02)**
Family Income in 1975							**0.20**	**(0.05)**
Mother's Occupation Missing							*-0.22*	*(0.10)*
-2 Log Likelihood	7543.53		7182.25		7175.95		6488.41	
Chi-Square	379.99		394.347		400.642		461.392	
df	8		9		11		19	

*BOLD < .001, ITALICS <.05

Table 4b. Log-Odds of WLS Respondent-Parent Wanting Selected Child to Graduate College (Or More)*

|	Estimate	Standard Error	Estimate	Standard Error	Estimate	Standard Error	Estimate	Standard Error
Intercept	**-4.28**	**(0.48)**	**-3.59**	**(0.51)**	**-3.53**	**(0.53)**	**-4.69**	**(0.75)**
Child's Age Over 20	*-0.02*	*(0.01)*	*-0.02*	*(0.01)*	*-0.02*	*(0.01)*	*-0.02*	*(0.01)*
Daughter	**-0.22**	**(0.05)**	**-0.23**	**(0.05)**	**-0.23**	**(0.05)**	**-0.24**	**(0.06)**
Mother	-0.08	(0.05)	-0.08	(0.06)	-0.10	(0.06)	-0.05	(0.07)
R's Mental Ability	**0.09**	**(0.02)**	**0.07**	**(0.02)**	**0.08**	**(0.02)**	0.04	(0.02)
Mother's Education	**0.17**	**(0.03)**	**0.13**	**(0.04)**	**0.13**	**(0.04)**	*0.11*	*(0.04)*
Mother Completed College ("Floor")	-0.14	(0.15)	-0.06	(0.16)	0.11	(0.18)	-0.12	(0.19)
Father's Education	**0.15**	**(0.02)**	**0.13**	**(0.02)**	**0.13**	**(0.02)**	**0.09**	**(0.02)**
Father Completed College ("Floor")	0.03	(0.12)	0.00	(0.13)	0.10	(0.13)	-0.01	(0.14)
R Planned to Attend College			**0.36**	**(0.07)**	0.10	(0.13)	0.07	(0.13)
Parent Has College Aspirations But Never Attended College					*0.33*	*(0.15)*	0.31	(0.16)
Parent Has College Aspirations And Attended College But Did Not Complete College					*0.33*	*(0.14)*	0.29	(0.15)
Mother's Occupational Education							**0.14**	**(0.03)**
Father's Occupational Education							**0.10**	**(0.03)**
Parent a Farmer							*-0.32*	*(0.14)*
Selected Child from Non-Intact Family							0.15	(0.10)
Number of Siblings (of Child)							**-0.08**	**(0.02)**
Family Income in 1975							**0.28**	**(0.05)**
-2 Log Likelihood	8526.52		8180.97		8174.92		7428.20	
Chi-Square	591.96		612.496		618.546		691.45	
df	8		9		11		19	

*BOLD < .001, *ITALICS <.05*

Table 5. Log-Odds of College Attendance for WLS Selected Children*

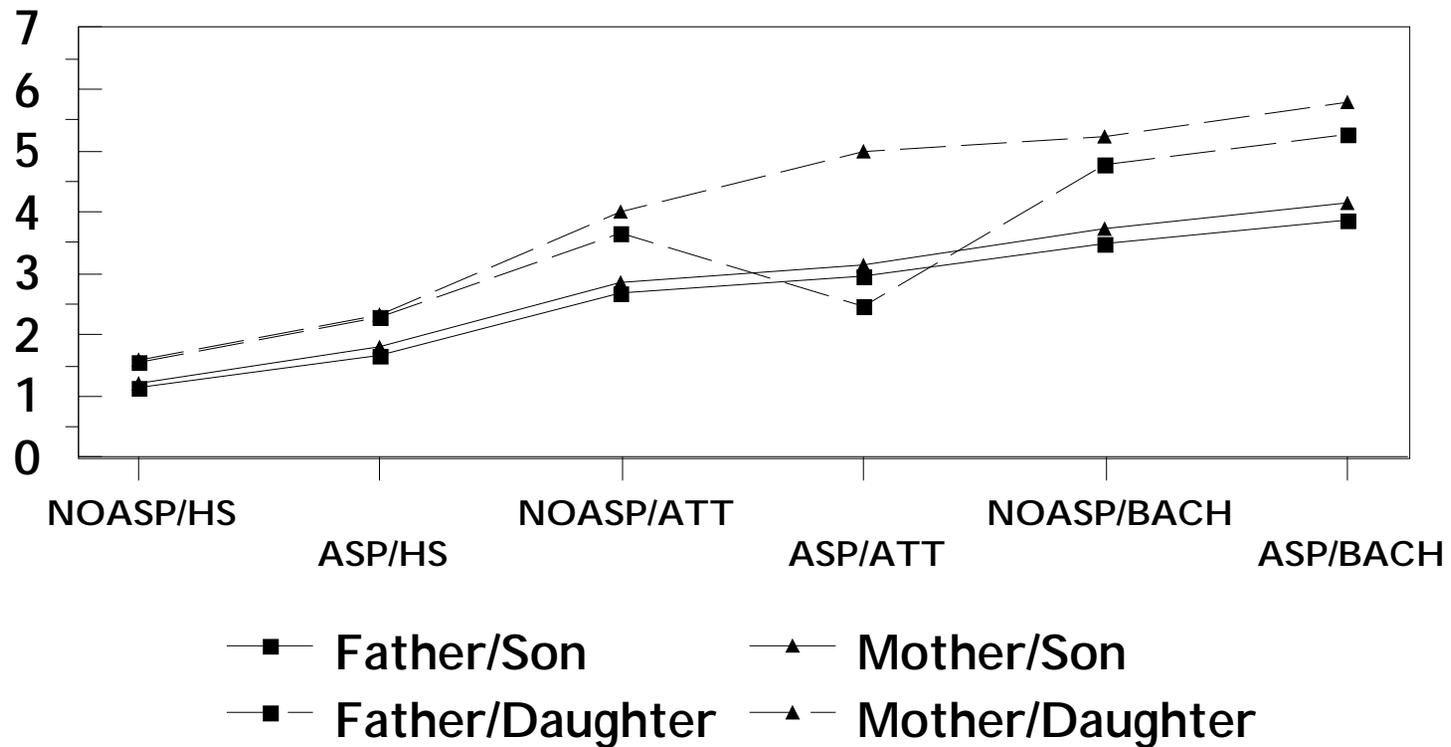|	Estimate	Standard Error	Estimate	Standard Error	Estimate	Standard Error
Intercept	**-5.75**	**(0.72)**	**-5.90**	**(0.72)**	**-5.87**	**(0.69)**
Child's Age Over 20	**-0.06**	**(0.01)**	**-0.06**	**(0.01)**	**-0.06**	**(0.01)**
Daughter	**0.27**	**(0.06)**	**0.29**	**(0.06)**	**0.29**	**(0.06)**
Mother	*0.17*	*(0.07)*	*0.18*	*(0.07)*	*0.19*	*(0.07)*
R's Mental Ability	**0.09**	**(0.02)**	*0.08*	*(0.03)*	*0.08*	*(0.02)*
Mother's Education	**0.23**	**(0.03)**	**0.23**	**(0.03)**	**0.23**	**(0.03)**
Mother Attended College ("Floor")	**0.39**	**(0.11)**	**0.38**	**(0.11)**	**0.38**	**(0.11)**
Father's Education	**0.15**	**(0.02)**	**0.14**	**(0.02)**	**0.14**	**(0.02)**
Father Attended College ("Floor")	*0.20*	*(0.09)*	0.16	(0.09)	0.16	(0.09)
R Planned to Attend College	0.00	(0.11)	-0.01	(0.11)		
Parent Has College Aspirations But Never Attended College	*0.33*	*(0.15)*	0.28	(0.15)	*0.27*	*(0.11)*
R Wanted Selected Child to At Least Attend College			**0.72**	**(0.07)**	**0.72**	**(0.07)**
Mother's Occupational Education	**0.14**	**(0.03)**	**0.13**	**(0.03)**	**0.13**	**(0.03)**
Father's Occupational Education	**0.19**	**(0.03)**	**0.18**	**(0.03)**	**0.18**	**(0.03)**
Parent a Farmer	0.05	(0.14)	0.11	(0.15)	0.11	(0.15)
Selected Child from Non-Intact Family	-0.19	(0.11)	-0.22	(0.11)	-0.22	(0.11)
Number of Siblings (of Child)	*-0.06*	*(0.02)*	*-0.05*	*(0.02)*	*-0.05*	*(0.02)*
Family Income in 1975	*0.16*	*(0.05)*	*0.13*	*(0.05)*	*0.13*	*(0.05)*
Mother's Occupation Missing	**-0.39**	**(0.10)**	**-0.36**	**(0.10)**	**-0.36**	**(0.10)**
-2 Log Likelihood	6230.70		6124.04		6124.06	
Chi-Square	1214.98		1321.64		1321.62	
df	18		19		18	

***BOLD < .001,** *ITALICS <.05*

Figure 1: Log-Odds of Completing High School: Aspirations x Parent's Education*
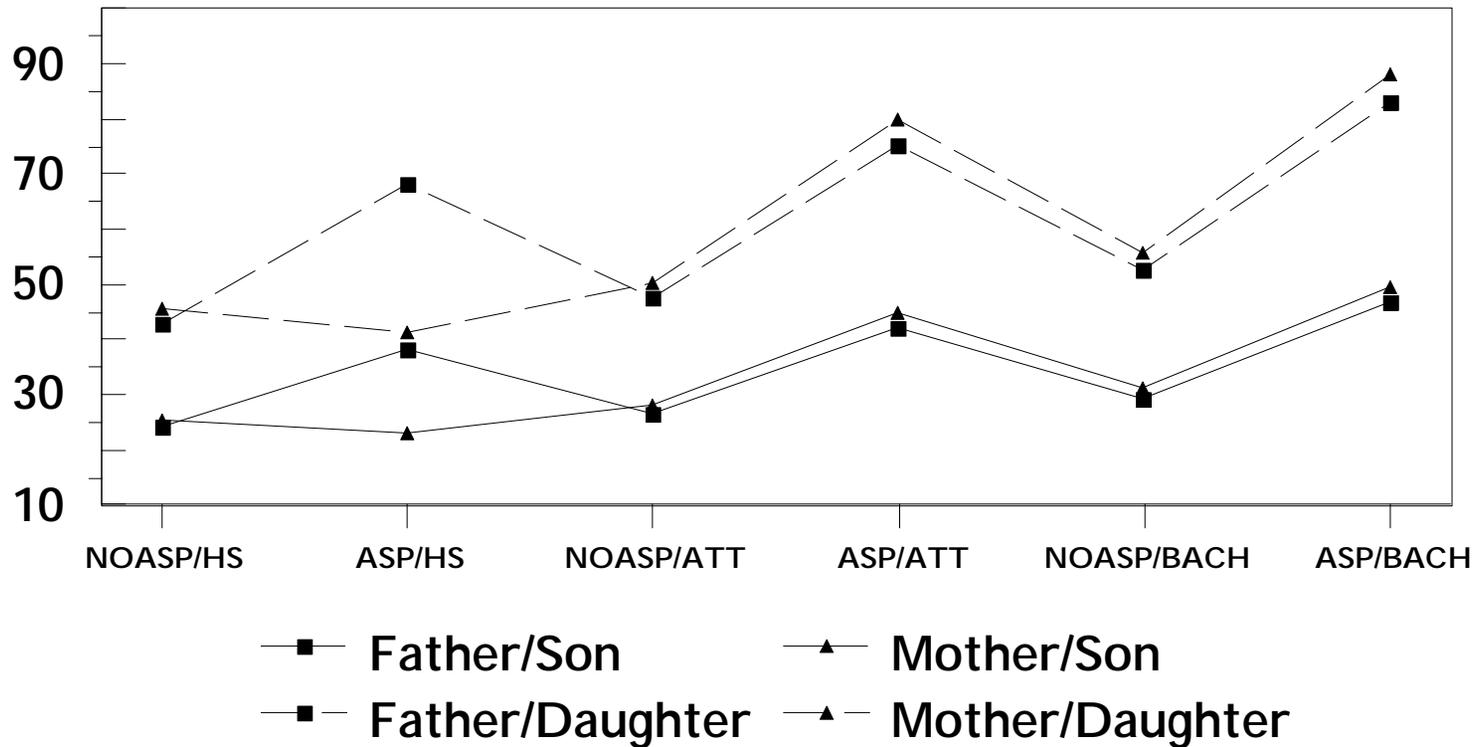
* Child's Age Over 20, R's Mental Ability, R's Occupational Education Score, Number of Siblings, and Family Income in 1975 are all evaluated at their mean. The Parents' Level of Education = HS (High School) is evaluated at 12 years; ATT (Attended College) is evaluated at 14 years; BACH (Completed College) is evaluated at 16 years.

Figure 2: Log-Odds of Attending College: Aspirations x Parent's Education

Legend: Father/Son — Mother/Son — Father/Daughter — Mother/Daughter

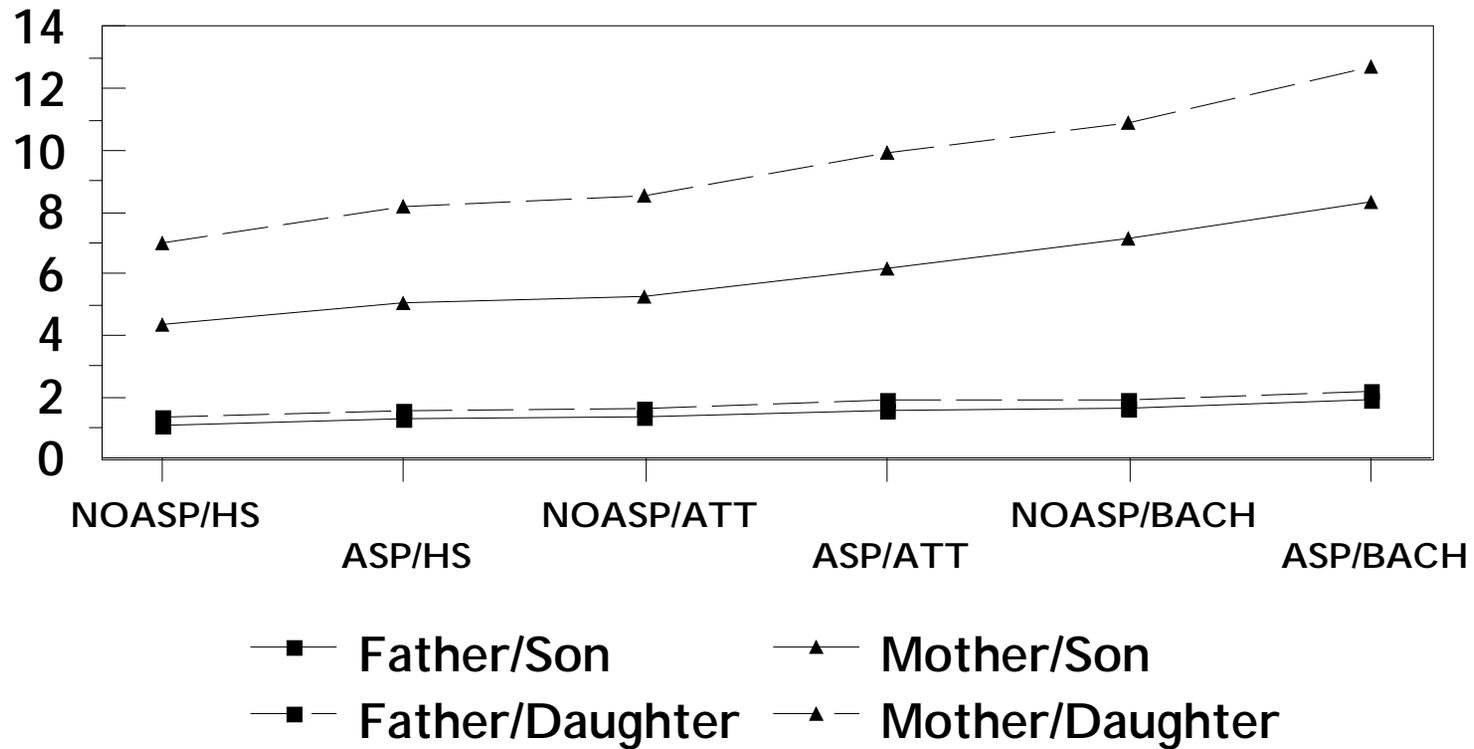X-axis categories: NOASP/HS, ASP/HS, NOASP/ATT, ASP/ATT, NOASP/BACH, ASP/BACH
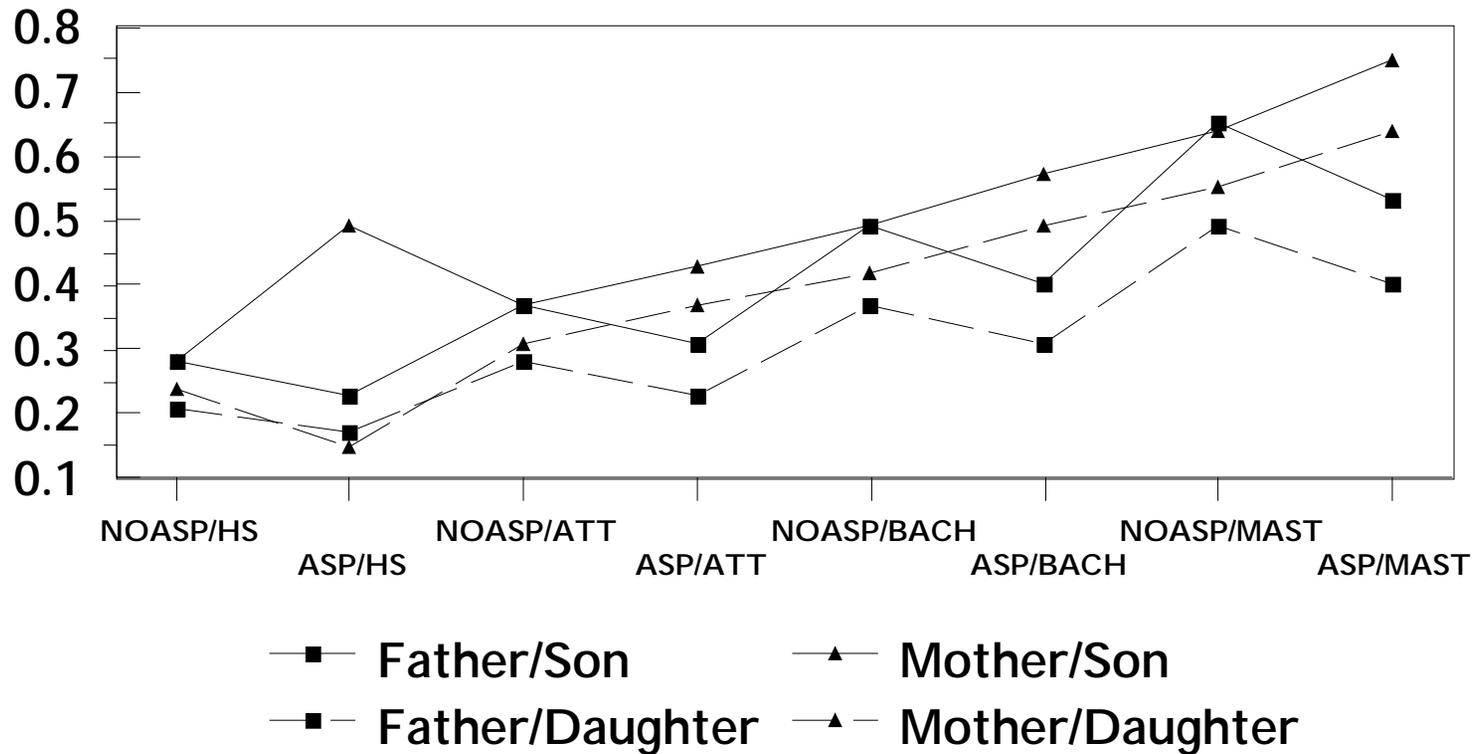
* Child's Age Over 20, R's Mental Ability, R's Occupational Education Score, Number of Siblings, and Family Income in 1975 are all evaluated at their mean. The Parents' Level of Education = HS (High School) is evaluated at 12 years; ATT (Attended College) is evaluated at 14 years; BACH (Completed College) is evaluated at 16 years.

Figure 3: Log-Odds of Completing College: Aspirations x Parent's Education

Legend: Father/Son, Mother/Son, Father/Daughter, Mother/Daughter

X-axis categories: NOASP/HS, ASP/HS, NOASP/ATT, ASP/ATT, NOASP/BACH, ASP/BACH

* Child's Age Over 25, R's Mental Ability, R's Occupational Education Score, Number of Siblings, and Family Income in 1975 are all evaluated at their mean. The Parents' Level of Education = HS (High School) is evaluated at 12 years; ATT (Attended College) is evaluated at 14 years; BACH (Completed College) is evaluated at 16 years.

Figure 4: Log-Odds of Graduate School: Aspirations x Parent's Education

* Child's Age Over 25, R's Mental Ability, R's Occupational Education Score, Number of Siblings, and Family Income in 1975 are all evaluated at their mean. The Parents' Level of Education = HS (High School) is evaluated at 12 years; ATT (Attended College) is evaluated at 14 years; BACH (Completed College) is evaluated at 16 years; MAST (Graduate School) is evaluated at 18 years.

Center for Demography and Ecology
University of Wisconsin
1180 Observatory Drive Rm. 4412
Madison, WI 53706-1393
U.S.A.
608/262-2182
FAX 608/262-8400
comments to: jsherida@ssc.wisc.edu
requests to: cdepubs@ssc.wisc.edu