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ABSTRACT

This study used data from the National Longitudinal Study of the High School Class of 1972 to examine factors influencing the educational and occupational attainment of American women. The longitudinal study followed 2,160 seniors from 1,200 schools for 14 years after high school graduation. A variation of the Wisconsin model, which examined influences on male educational and occupational attainment, was used. The study found that educational attainment was the strongest predictor of occupational attainment. Unlike the Wisconsin model, it found that academic performance was primarily a function of ability; socioeconomic status (SES) was negative and small relative to ability. Like the Wisconsin model, this study found academic achievement and SES had the strongest effects on significant others' influence. Unlike the Wisconsin model, significant others' influence had no direct effect on occupational aspiration for this sample. The primary influence on educational attainment was educational aspiration and gender. SES had a more powerful effect on educational attainment than on occupational attainment. Marital status had no influence on educational or occupational attainment, although number of children had a negative effect on educational attainment; this effect was equal for both sexes. (Contains 34 references.) (DB)

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**THE EDUCATIONAL AND OCCUPATIONAL ATTAINMENT  
PROCESS FOR AMERICAN WOMEN**

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## THE EDUCATIONAL AND OCCUPATIONAL ATTAINMENT PROCESS FOR AMERICAN WOMEN

This study estimated a variation of the Wisconsin model (an accepted process by which American men attain their social status in American society) to address these questions: Is the status attainment process for women the same as that for men? In particular, does socioeconomic background play a similar role for women in determining their status attainment when examined from the same sociological perspective as that for men? The factors influencing the attainment variables were hypothesized in a longitudinal-causal model for the national sample of high school seniors of 1972 (the year in which Title IX of the Education Amendments was enacted, opening greater educational opportunities for women) in order to examine the process by which aspirations were developed and the manner in which they influenced subsequent attainment-oriented behaviors. The results of path analysis for this study ( $N = 2,160$ ) revealed that the attainment process for men and women was basically the same and that social origin was equally important for both sexes. Punctuating a very strong linkage between educational and occupational attainment, the results also provided considerable evidence that the development and the maintenance of status aspirations, in addition to academic performance and significant others' influence, during secondary education exerted a pronounced influence on an American individual's success in the adult and occupational world.

## THE EDUCATIONAL AND OCCUPATIONAL ATTAINMENT PROCESS FOR AMERICAN WOMEN

The educational structure<sup>a</sup> in the United States is so closely intertwined with the occupational structure that it is almost impossible to discuss one without discussing the other (Woelfel, 1972). "During the past two decades, a variety of structural research on the status-attainment paradigms has flourished within [American] sociology" (Breiger, 1995, p. 115). According to Hanson (1994), however, research on status attainment has relied on a functionalist socialization model, beginning with the Blau-Duncan (1967) Model of the Occupational Attainment Process of the American Adult Male Population and continuing with the Sewell-Haller-Portes (1969) Model of Educational and Occupational Attainment Levels (or simply the Wisconsin model). In other words, "The Blau-Duncan and Wisconsin models are representative of the two main status-attainment orientations that sociological thought has followed" (Haller & Portes, 1973, p. 56).

The Blau-Duncan model, which was first estimated for American adult male samples derived from the Current Population Survey of 1962, has been best known among causal theories of status attainment in American sociology. Blau and Duncan (1967) reconceptualized the classic questions of mobility research that focused on the extent to which ascriptive factors at birth would determine subsequent attainment levels and to which initial positions of individuals in the stratification system would influence their social positions at later points in time. This

model posited the following: Although the father's social standing exercises some direct influence, its primary effect on the son's occupational attainment is indirect through the son's educational attainment, which exerts an influence on both his first and current occupational status outcomes, while the former has a sizable effect on the latter. Indeed, the Blau-Duncan model estimation provided considerable evidence of the influence of the father's social standing on the son's status attainment (Kerckhoff & Huff, 1974) but did not answer the following crucial questions (Haller & Portes, 1973): What are the mediating processes by which the father's status influences the son's educational and occupational attainment? And in what specific ways are the son's mental ability and academic performance related to his attainment? Answers to these questions required an examination of the causal process at a more specific social-psychological level. Thus "The Wisconsin model is the first major attempt to provide a social-psychological elaboration of the Blau-Duncan model" (Hauser, Tsai, & Sewell, 1983, p. 20).

The Wisconsin model was first estimated by using the data collected from American white men who graduated from Wisconsin high schools in 1957 and were followed up in 1964. Among eight different variables (mental ability, socioeconomic status [SES], academic performance, significant others' influence, educational aspiration, occupational aspiration, educational attainment, and occupational attainment), the causal relationships implied by the model were tested. Sewell, Haller, and Portes (1969) theorized

that status attainment was a function of a cognitive-motivational component built by aspirations and of a contextual component built by social-psychological factors affecting their attainment.

The Wisconsin model estimation basically found that significant others' influence exerted an effect on educational and occupational aspirations. Aspiration (ambition), according to Gottfredson and Becker (cited in Rojewski, 1996), is not necessarily a determinant of attainment, yet adolescents' aspirations tend to play an active role in determining whether they pursue or ignore educational opportunities available to them, especially during high school. This estimation also underlined the importance of social-psychological influence in the development and the maintenance of status aspirations (Sewell & Hauser, 1980). Presumably, students from higher-SES homes are more likely than students from lower-SES homes to score better on tests of cognitive skills because of their more favorable climates in developing these skills and because of their parents' emphasis on academic achievement. Execution of enduring attitudes (educational and occupational aspirations), in Haller and Portes's (1973) words, is an essential process in status attainment because it involves a realistic assessment of chances conveyed to one's ego by others and one's own self-evaluations.

The Wisconsin model has resulted in an accepted and traditional understanding of the process by which American men attain their social status in American society (Alwin, Otto, & Call, 1976). The bulk of the studies (e.g., Alexander, Eckland, & Griffin, 1975; Crouse & Mueser, 1978; Gilbert, 1977; Kerckhoff

& Huff, 1974; Marini, 1978); Picou & Carter, 1976) replicating the Wisconsin model in the sociological context has been devoted to the attainment process for men only. Therefore, the women's process needs to be better understood to answer these questions: Is the process by which women attain their status the same as that for men? In particular, does socioeconomic background play a similar role for women in determining their status attainment when examined from the same sociological perspective?

The purpose of this study was thus to estimate a variation of the Wisconsin model for the national sample of high school seniors of 1972 (the year in which Title IX of the Education Amendments was enacted, opening greater educational opportunities for women) in order to determine the process by which aspirations were developed and the manner in which they influenced subsequent attainment-oriented behaviors. Educational attainment in the Wisconsin model was operationalized as a dichotomous variable, but in this study it was considered to be a continuous variable. Occupational attainment was the ultimate variable in the model, but the major interest of this study was educational attainment, the factors influencing it, and its role as a moderating variable for the indirect influences on occupational attainment.

## **METHOD**

### **Causal Model**

The factors influencing status attainment were theorized in a longitudinal-causal model, incorporating the core constructs of the Wisconsin model. Although each variable in the model was



hypothesized to influence the attainment variables, the manner in which this influence was exerted was expected to differ. Figure 1 depicts the structure of the model, navigating the process. Each straight line in the model represents the theorized direct effect of one variable on another, with the arrow indicating the direction of influence. The curved line illustrates that two variables are related but no causal relationship is theorized.

This model proposed that academic performance was the first endogenous variable and was dependent on the prior exogenous variables. Academic performance was expected to be determined by SES and mental ability (hereinafter referred to as ability). SES and ability were exogenous variables and were determined by causes external to the model. SES and academic performance were expected to affect significant others' influence. The Wisconsin model estimation revealed that parental status and encouragement for male students to attend college had strong effects on their obtaining a bachelor's degree. It was further hypothesized that the dominant effect on educational and occupational aspirations would be significant others' influence. The effects of SES and ability were hypothesized to be manifested indirectly, mediated by significant others' influence and academic performance. Consistent with the Wisconsin model, no causal effect was anticipated between educational and occupational aspirations, and the determinants of educational attainment were expected to be significant others' influence and educational aspiration.

At this point, additional influences were included in the proposed model. Spousal (and children) influences do not affect

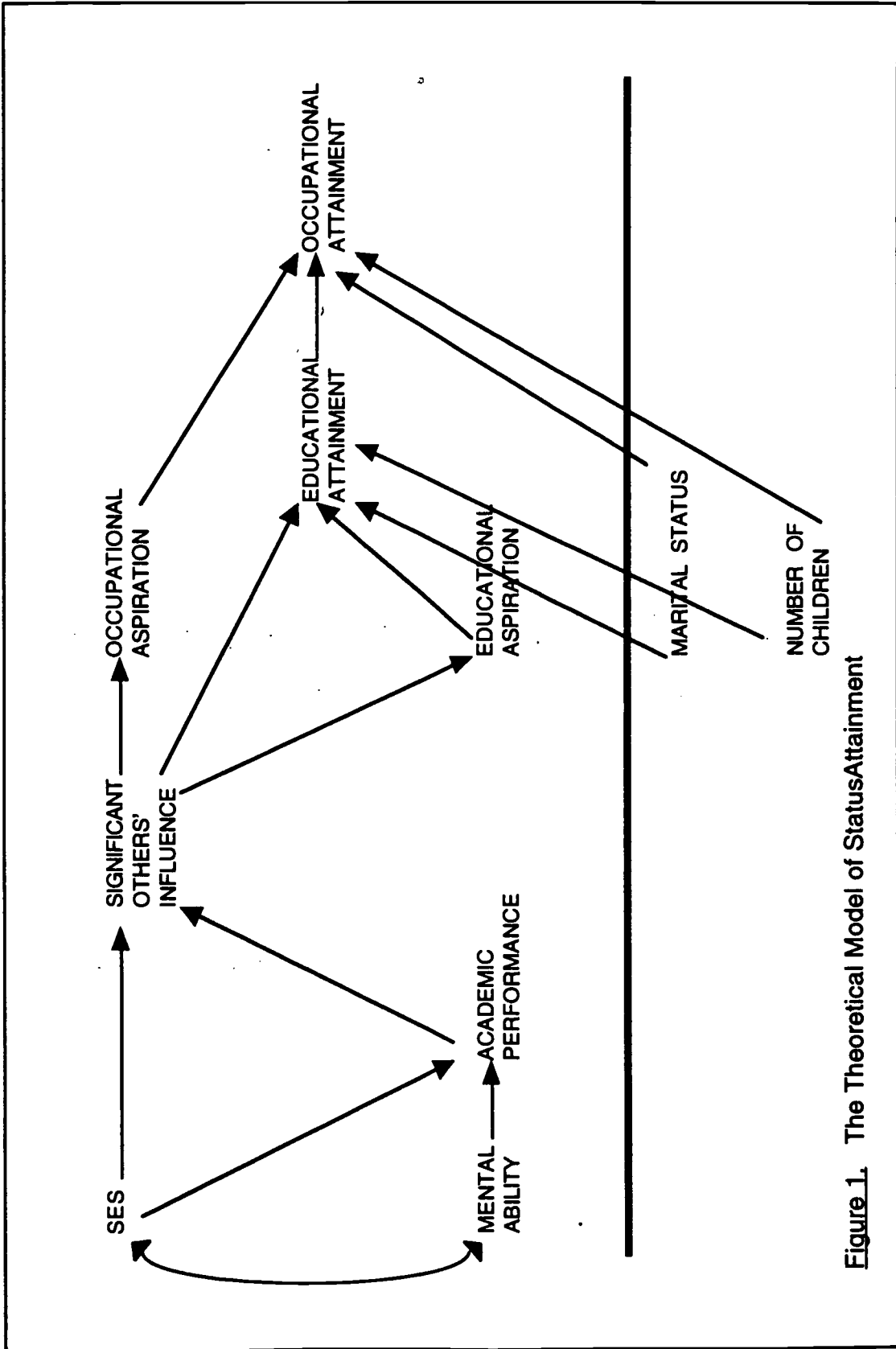


Figure 1. The Theoretical Model of Status Attainment

educational and occupational attainment for men but affect those for women (Airsman, 1993). Women's attainment may be influenced by their marital status and the number of children they have. As Stoecker and Pascarella (1991) theorized, however, marital status (and children) was considered to be determined by factors outside the model. These variables were presumed to be caused by external factors but did not fit as exogenous variables because their placement within the model presumed a temporal sequence; these variables were simply tested to examine what their effects were, if any, on educational and occupational attainment.

The final variable in the model was occupational attainment, which was expected to be determined by occupational aspiration, educational attainment, marital status, and the number of children. Although no direction of influence was hypothesized for marital status and the number of children, all the other influences within the model were hypothesized to be positive.

Readers may consider the proposed model to be misspecified by the omission of the measures of institutional characteristics and student involvement within institutions. The model was not a college-effects research focusing only on women who had pursued higher education following high school graduation. In order for the status attainment process for women to be better understood, it was imperative that the sample include those who had reached all levels of education. This was particularly important because only 58% of this study's sample obtained a bachelor's degree or higher. The majority of research concerning American women's

status attainment have focused only on women who had attended college, yielding information more on institutional effects on the attainment level rather than on the attainment process.

### **Sample**

Data for this study were obtained from the National Longitudinal Study of the High School Class of 1972 (NLS-72), sponsored by the National Center for Educational Statistics (NCES). The sample design for NLS-72 is a stratified two-stage probability: A sample of 1,200 schools was selected; then a random sample of 18 seniors per school was chosen (NCES, 1977). The population consisted of all 12th graders enrolled during 1972 in private and public high schools nationwide. NLS-72 first surveyed those seniors in 1972 and followed up in 1973, 1974, 1976, 1979, and 1986. What made NLS-72 especially attractive was that it followed respondents for 14 years after high school graduation, facilitating an examination of the labor-market experiences and educational attainment. The results of analysis reported in this paper are based on the 2,160 respondents who had complete data for all the variables described below.

### **Variables**

Among 10 variables used in the proposed model, seven were measured as single items, and three were measured as four-item scales. Because of extensive missing data on the father's and mother's education, the NLS composite indicator of the father's and mother's education was used. Because of extensive missing data on the father's and mother's occupations, a single variable

indicating the family occupational status was created: If the father's occupational status was higher than the mother's, then the father's was used; if the mother's was higher than the father's, the mother's was used; if the mother's was missing, the father's was used; and if the father's was missing, the mother's was used. Ability was operationalized by utilizing the formula score from the 1972 base-year test battery (developed by the Educational Testing Service) in four areas: vocabulary (the ability to read the English language), reading (the ability to understand short passages), letter groups (the ability to find concepts in a nonverbal context), and mathematics (the ability to solve reasoning problems). Academic performance, significant others' influence, educational aspiration, and occupational aspiration were taken from the 1972 survey, whereas educational attainment, occupational attainment, marital status, and the number of children were taken from the 1986 follow-up survey.

Ability and SES were considered to be exogenous variables determined by factors outside the causal system of the model. With the exceptions of marital status and the number of children, all others were considered to be endogenous variables determined within the causal system of the model. Table 1 presents full operational definitions of all the variables used in the model.

### **Analysis**

Prior to the model estimation, to determine if the influence within the model was the same for men and women, the interaction terms between the variable indicating "sex" and other independent

Table 1

Operational Definitions of Variables

Variables	Definitions
<u>Exogenous Variables:</u>	
Socioeconomic Status (SES) (1972)	A four-item scale based on the educational level of (1) the father and (2) the mother, (3) the family occupational status, and (4) the level of family income. There are five levels of education (from "less than high school diploma" to "master's or doctoral degree"). Duncan's (1961) socioeconomic index (SEI) classification system was used to determine the family occupational status, and 10 income levels (from "less than 3,000" to more than "18,000"). All items were standardized and summed. Internal consistency reliability = .795.
Ability (1972)	A four-item scale based on test scores of the respondent in four areas: (1) vocabulary, (2) reading, (3) letter groups, and (4) mathematics. All items were standardized and summed. Internal consistency reliability = .798.
<u>Endogenous Variables:</u>	
Academic Performance (1972)	A single item assessing the respondent's rank in high school class. The rank was measured as actual percentile rank.
Significant Others' Influence (1972)	A four-item scale based on the respondent's report of significant others' influence: whether or not (1) the father, (2) the mother, and (3) the teachers encouraged the respondent to go to college. All items were summed. Internal consistency reliability = .603.
Educational Aspiration (1972)	A single item measuring the respondent's educational aspiration level with six categories ranging from "less than high school" to "graduate or professional school."
Occupational Aspiration (1972)	A single item measuring the level of occupational status to which the respondent aspired. Each of the aspired occupations was coded using Duncan's (1961) SEI classification system.
Educational Attainment (1986)	A single item measuring the highest degree earned by the respondent in 1986 with seven response categories: some high school, high school diploma, two-year or more in vocational school, some college, college graduate, master's degree, and doctoral or professional degree.
Occupational Attainment (1986)	A single item measuring the level of occupational status to which the respondent attained in 1986. Each of the attained occupations was coded using Duncan's (1961) SEI classification system.
<u>Control Variables:</u>	
Marital Status (1986)	A single item reflecting whether the respondent had married or had marriage-like relationships (originally coded: 1 = yes, 2 = no; then recoded 1 = no, 2 = yes).
Number of Children (1986)	A single item measuring the number of children the respondent had with five response categories (from "none" to "seven or more").

variables were computed. For each of the six equations defining the model, the appropriate interaction terms were added; then the increase in the amount of variance explained was tested for significance. For each equation the change in  $R^2$  was significant ( $p < .001$ ); however, none of the increments in variance explained (1% or less) were considered substantively important, and those levels of significance were considered to be the results of the large sample size. The effects of the variables within the model were then considered to be the same for men and women. Thus the process was the same, yet sex could still have played a role in the model because men and women may have differed in constructs, even though relationships among the constructs were similar for both sexes. The model was then estimated for the combined sample of men and women, including sex as an exogenous variable.

The direct and indirect effects implied by the model were estimated from means, standard deviations, and correlations (see Table 2) among all the variables used as input into Wolfle and Ethington's (1985) GEMINI program, based on Sobel's (1982) work. Ordinary least-squares procedures were used to estimate the coefficients of equations defining the model with each endogenous variable regressed on all exogenous variables and causally antecedent endogenous variables. All the possible paths of effects within the model were estimated to test whether the paths hypothesized to be zero were nonsignificant. The direct effects are represented by regression coefficients, either standardized (beta weight) or unstandardized ( $b$  weight), which are interpreted

**Table 2**  
**Correlations, Means, and Standard Deviations for Variables in the Model of Status Attainment**

	1	2	3	4	5	6	7	8	9	10	11
1. SES	1										
2. Sex	-.027	1									
3. Ability	.320	-.029	1								
4. Academic Performance	.084	.202	.525	1							
5. Significant Other's Influence	.130	.025	.228	.235	1						
6. Educational Aspiration	.302	-.126	.375	.289	.359	1					
7. Occupational Aspiration	.190	-.195	.257	.241	.116	.380	1				
8. Marital Status	-.054	.016	-.027	-.008	-.054	-.095	-.043	1			
9. Number of Children	-.127	.086	-.100	-.053	-.047	-.126	-.121	.431	1		
10. Educational Attainment	.285	-.109	.406	.371	.247	.482	.359	-.103	-.193	1	
11. Occupational Attainment	.182	-.068	.257	.249	.088	.245	.321	-.057	-.144	.476	1
Mean	.016	1.520	.030	68.840	6.771	5.280	64.044	1.848	1.178	4.788	58.416
SD	3.151	.500	3.140	24.387	1.202	.991	19.270	.359	1.118	1.050	19.670



in the usual manner. The indirect effects (which are estimated by the sum of the products of direct effects through intervening variables) represent the influences on the dependent variable that are the results of directly influencing the prior causal variables in the model. Comparisons of the relative effect of variables within an equation are made by examining the standardized coefficients. Consistent with the recommendation of Land (1969) and Pedhazur (1982), only the standardized effects greater than .05 are considered of substantial importance.

## **RESULTS**

Figure 2 diagrams all the direct effects listed in Table 3, in which the estimated coefficients of each of the six equations defining the model are shown in standardized and unstandardized forms. Coefficients represent the direct influences of the individual predictor variables on the respective dependent variables. Thus each coefficient indicates the average amount of change in the dependent variable produced by a unit change in the independent variable when the other independent variables in the equation are held constant. Table 4 presents the estimated direct, indirect, and total effects on the attainment variables.

## **DISCUSSION**

### **Comparisons with the Wisconsin Model**

Many of the effects hypothesized to be zero by the Wisconsin model are statistically significant in this study; however, the significance may in part be due to the larger sample ( $N = 2,160$ ), as compared to the Wisconsin model estimation ( $N = 739$ ). In

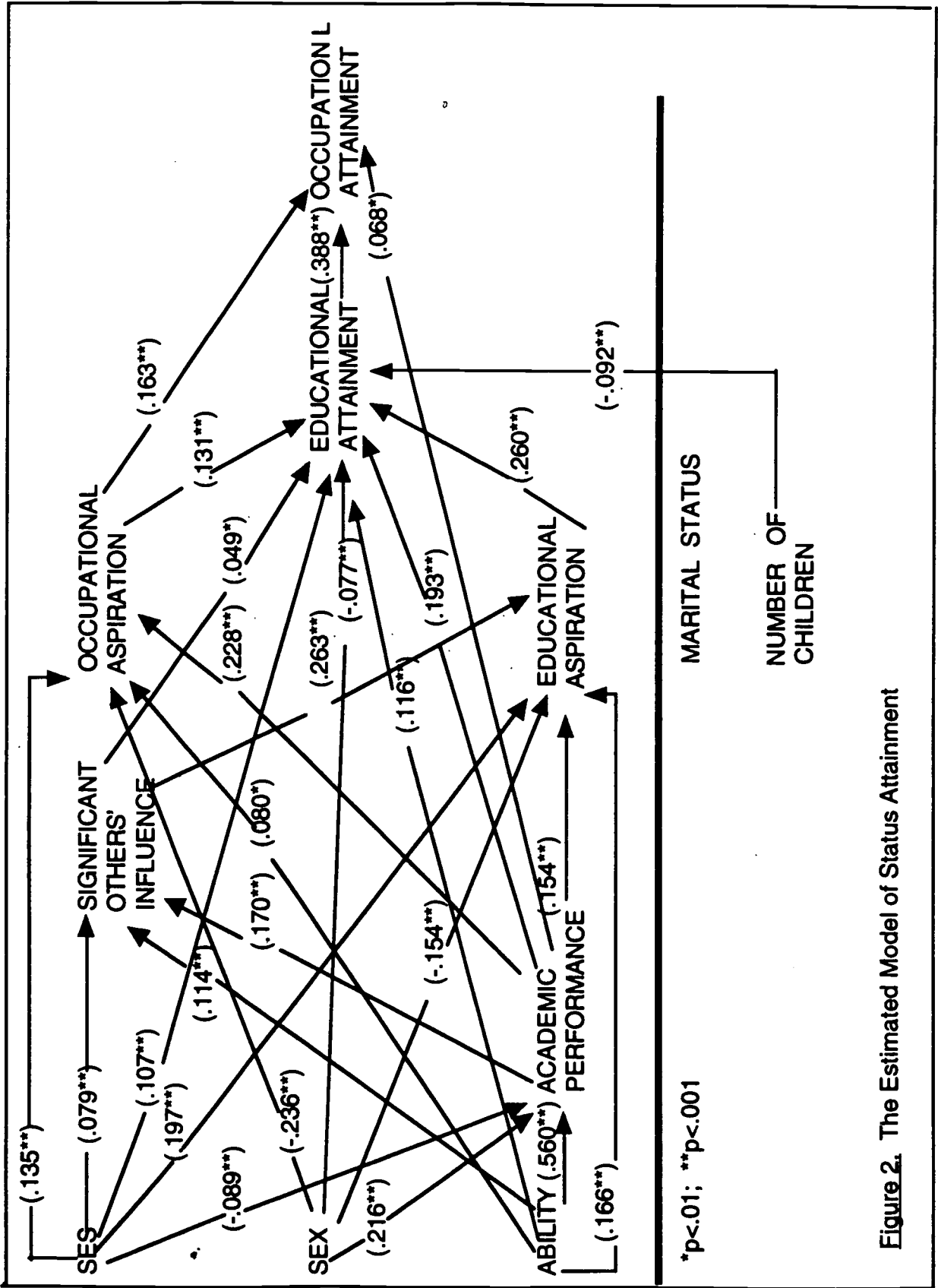


Figure 2. The Estimated Model of Status Attainment

Table 3

Direct Effects in the Model of Status Attainment<sup>a</sup>

	Dependent Variables					
	4	5	6	7	10	11
1. SES	-.089** (-.691)	.079** (.030)	.197** (.062)	.135** (.823)	.107** (.036)	.048 (.298)
2. Sex	.216** (10.527)	-.004 (-.009)	-.154** (-.304)	-.236** (-9.089)	-.077** (-.161)	-.005 (-.214)
3. Ability	.560** (4.348)	.114** (.043)	.166** (.053)	.080* (.492)	.116** (.039)	.026 (.163)
4. Academic Performance		.170** (.008)	.154** (.006)	.228** (.180)	.193** (.008)	.068* (.055)
5. Significant Others' Influence			.263** (.217)	.033 (.523)	.049* (.043)	-.043 (-.700)
6. Educational Aspiration					.260** (.275)	-.038 (-.760)
7. Occupational Aspiration					.131** (.007)	.163** (.166)
8. Marital Status					-.019 (-.055)	.008 (.451)
9. Number of Children					-.092** (-.086)	-.047 (-.827)
10. Educational Attainment						.388** (7.278)
11. Occupational Attainment						
R <sup>2</sup>	.330	.076	.280	.151	.362	.263

<sup>a</sup>Unstandardized (metric) coefficients are given in parentheses.  
\* $p < .01$ ; \*\* $p < .001$ .

Table 4

Summary of Effects on Educational and Occupational Attainment<sup>a</sup>

	Educational Attainment			Occupational Attainment		
	Direct Effects	Indirect Effects	Total Effects	Direct Effects	Indirect Effects	Total Effects
SES	.107** (.036)	.053** (.018)	.160** (.054)	.048 (.298)	.065** (.404)	.113 (.702)
Sex	-.077** (-.161)	-.010 (-.021)	-.087** (-.182)	-.005 (-.214)	-.046** (-1.821)	-.051 (-2.035)
Ability	.116** (.039)	.227** (.076)	.343** (.115)	.026 (.163)	.185** (1.160)	.211 (1.323)
Academic Performance	.193* (.008)	.091** (.004)	.284** (.012)	.068* (.055)	.133** (.108)	.201* (.163)
Significant Others' Influence	.049* (.043)	.073** (.063)	.122* (.106)	-.043 (-.700)	.043** (.697)	.000 (-.003)
Educational Aspiration	.260** (.275)	-	.260** (.275)	-.038 (-.760)	.101** (2.003)	.063 (1.243)
Occupational Aspiration	.131** (.007)	-	.131** (.007)	.163** (.166)	.051** (.052)	.214** (.218)
Marital Status	-.019 (-.055)	-	-.019 (-.055)	.008 (.451)	-.007 (-.398)	.001 (.053)
Number of Children	-.092** (-.086)	-	-.092** (-.086)	-.047 (-.827)	-.036** (-.629)	-.083 (-1.456)
Educational Attainment	-	-	-	.389** (7.278)	-	.389** (7.278)

<sup>a</sup>Unstandardized coefficients are given in parentheses.

\* $p < .01$ ; \*\* $p < .001$ .

particular, the process is the same for men and women comprising this sample. This is the result of the lack of interactive effects, indicating that the magnitude and the direction of each effect are the same for men and women. Thus (1) the relationship between aspiration and attainment and (2) the process by which aspiration and attainment are reached are consistent for both.

The Wisconsin model hypothesized that the dominant effect on academic performance would be ability, with a possible effect from parental socioeconomic status (SES). This study supports these effects because academic performance is mostly influenced by ability. The effect of SES on academic performance is negative and very small, relative to that of ability. This is an unexpected result because research has emphasized "a positive relationship between social background and performance in the educational system" (Hauser, 1970, p. 104). Perhaps for this sample, the monetary benefits of higher SES result in those students attending more challenging and competitive schools.

The Wisconsin model further hypothesized that the dominant effects on significant others' influence would be academic performance and SES. This study fairly supports these effects. Academic performance has the strongest (and SES has the third strongest) effects on significant others' influence. Ability has a strong direct effect (even stronger than its indirect effect) on significant others' influence; when combined with its indirect effect, ability carries the strongest impact on significant others' influence, and SES appears less important. It is then

academic performance and ability that establish significant others' influence, rather than SES from which students come. The fact that the primary influence on educational aspiration in the Wisconsin model is significant others' influence is substantiated in the model for this study. While significant others' influence has the dominant effect on educational aspiration, SES determines educational aspiration directly, rather than indirectly.

Unlike the Wisconsin model, significant others' influence has no direct effect on occupational aspiration for this sample. The dominant influences on occupational aspiration are academic performance and sex. SES affects two types of aspiration directly, rather than indirectly, through significant others' influence. As hypothesized by the Wisconsin model, the primary influence on educational attainment is educational aspiration. Although the Wisconsin model posits a possible effect from significant others' influence on educational attainment, this is not the case in this study, in which the effect is very small, even though statistically significant. Academic performance and occupational aspiration have much larger effects than does significant others' influence on educational attainment. There is a continuing direct effect of SES (greater than its indirect effect) on educational attainment, which in turn has the strongest influence on occupational attainment. Occupational aspiration has the direct effect on occupational attainment.

In most instances, the dominant effects of the variables in the model hypothesized by the Wisconsin model are forthcoming in

this study, yet SES does play a much larger role in influencing subsequent constructs than what was anticipated, and its effect is direct. The direct influence of sex on educational and occupational aspirations and on educational attainment indicates that even after controlling other social-psychological factors, women still have lower educational and occupational aspirations and attain lower educational levels. The lack of the significant effect of sex on occupational attainment indicates, however, that men and women with similar levels of occupational aspiration and educational attainment achieve the same occupational status.

#### **The Process of Status Attainment**

Evidencing that the strongest positive direct effect on occupational attainment comes from educational attainment, this study supports Haller and Portes' (1973) notion that the impact of SES on occupational attainment is indirect, through enhancing educational and occupational aspirations as well as educational attainment. The two types of aspiration strongly influence educational levels attained by this sample and strongly support Rojewski's (1996) notion that educational and occupational aspirations are very important precursors to status attainment.

The attainment process appears to be complex and is, in essence, a complex multivariate process. "The most critical factor in the process of attaining higher education is the decision to plan on and to enter college" (Sewell & Hauser, 1975, P. 9). This study confirms that "To pursue or to ignore a postsecondary education" (Rojewski, 1996) is a matter of great

importance for high-school seniors in terms of status attainment. Yet it is found, after considering the indirect and total effects on educational attainment, that ability and academic performance are the strongest ones. Even so, educational aspiration still arises as a key contributor to educational attainment, mediating the effects of ability and SES. "Schools are primary agencies of social selection for children and youth in the United States" (Hauser, 1970, p. 102). With such an emphasis, "Everything that happens to a boy before his sixteenth birthday influences everything that happens after that by way of his education" (Siegel, cited in Hauser, 1970, p. 111). More recent research pronounces, "Educational stratification begins in earnest when children start formal schooling" (Entwisle, 1993, p. 401).

The notion that the impact of social origin is decidedly stronger on educational attainment than on occupational attainment is one that has considerable face validity. This study supports the validity because SES has a direct effect on educational attainment but not on occupational attainment. Social-class positions predict the test score (Charters, cited in Hauser, 1970). Lower-SES students are more likely than higher-SES students to demonstrate better academic performance for this sample, yet higher-SES students may attend schools with more competitive student bodies. The second strongest direct effect on educational attainment derives from academic performance, supporting Pope's (1972) finding: "High school rank is a well recognized predictive value for a college degree" (p. 38). The



effects of SES and ability on educational attainment are mediated by academic performance, status aspiration, and significant others' influence. In this study, ability (more than six times the effect of SES) has the strongest direct influence on academic performance, which has the second strongest direct influence on educational attainment. On the assumption that "Failure to achieve in school can have negative effects on occupation and income" (Anderson, 1993, p. 342), these results are notable.

The impact of educational attainment (two times the effect of occupational aspiration and six times the effect of academic performance) on occupational attainment is not negligible; in fact, it punctuates a very strong linkage between educational and occupational attainment. Nearly everyone agrees that higher education is considerably useful for status attainment, yet the basic fact that educational and occupational status outcomes are intertwined is rarely disputed. This is because many educators advocate that higher education should provide students with vocational training, whereas just as many educators give higher priority to other goals, such as the intellectual or personal development of students (Spaeth & Greeley, 1970). The key to understanding the underpinnings of the American social structure is thus to understand how strongly educational and occupational aspiration are related (Woelfel, 1972). The premise that occupational attainment is associated with not only academic performance but also social background (Grubb, 1993) is supported by this study because the indirect positive effect of SES on

occupational attainment is small but significant. Furthermore, this study supports Treiman and Terrell's (1975) theory that occupational attainment is significantly dependent on educational attainment and slightly dependent on social background.

After all, in this model estimation, ability produces academic performance, and both of which establish significant others' influence; occupational aspiration is determined by academic performance; and the primary effect on educational aspiration comes from significant others' influence. SES, indeed, impacts both types of aspiration directly. Educational attainment (mainly the result of academic performance and educational aspiration) is in turn the determinant of occupational attainment, though it is strongly influenced by occupational aspiration. These results once again support Treiman and Terrell's (1975) premise that the processes of educational and occupational attainment are virtually the same.

#### **Impact of Marriage and Children**

In this study marital status has neither direct nor indirect influences on educational and occupational attainment, supporting the findings of Nesbitt (1995) that status attainment is not related to marital status for men and women and that married women are just as likely as single women to hold similar-level positions at work. It may be, in the United States, that marital differences are less important than gender differences on status attainment (Roos, cited in Nesbitt, 1995) and that the equality of male and female occupational status is not so anomalous with respect to other gender inequalities (McClendon, 1976). The

number of children has a negative direct effect on educational attainment; the dual responsibility of work and family may be the reason. The effects of marriage and the number of children as independent variables on status attainment are the same for both sexes and are relatively small within the context of this model.

### CONCLUSIONS

Given the comparability of the results of this study that (1) the attainment process is similar for men and women of this sample and that (2) the process for this sample is similar to that of the Wisconsin model estimation for 1957 high school graduates, it does appear that the attainment process is rather stable; therefore, this process may be generalizable to today's American youth. That is, not only is the attainment process still the same but the importance of educational aspiration is also still the determinant of educational attainment.

Thus the results of this study can be used for enhanced academic and career education and for counseling adolescents in their transition from high school to adult life who often need help in setting attainable educational and occupational goals. Despite the fact that educational aspiration for this model was measured in the respondent's senior year of high school, there was a considerable influence of significant others on educational aspiration. This influence would be equally important perhaps in the earlier years of schooling. This judgement underscores the needs for parents, teachers, and school counselors to encourage and to assist students in the early years of schooling.

## REFERENCES

- Airsman, L. A. (1993). A comparative study of the occupational attainment processes of white men and women in the United States. Journal of Comparative Family Studies, 24(2), 171-187.
- Alexander, K. L., Eckland, B. K., & Griffin, L. J., (1975). The Wisconsin model of socioeconomic. American Journal of Sociology, 81(2), 324-342.
- Alwin, D. F., Otto, L. B., & Call, V. R. A. (1976). The schooling process in the development of aspirations: A replication. Unpublished paper, Indiana University.
- Anderson, K. H. (1993). The effect of deviance during adolescence on the choice of jobs. Southern Economic Journal, 60(2), 341-356.
- Blau, P. M., & Duncan, O. D. (1967). The American occupational structure. New York: Wiley.
- Breiger, R. L. (1995). Social structure and the phenomenology of attainment. Annual Review of Sociology Annual, 21, 115-136.
- Crouse, J., & Mueser, P. (1978). Young men's socioeconomic achievement in the United States. Unpublished mimeograph. University of Chicago.
- Duncan, O. D. (1961). A socioeconomic index for all occupations. In A. J. Reiss (Ed.). Occupations and social status (pp. 109-138). New York: Free Press.
- Entwisle, D. R. (1993). Entry into school: The beginning school transition and educational stratification in the United States. Annual Review of Sociology Annual, 19, 401-423.
- Gilbert, S. (1977). In R. A. Carlton, L. A. Colley, & N. J. Mackinon (Eds.). Education, Change, and Society: A Sociology of Canadian Education (p. 281). Toronto: Gage Educational Publishing.
- Grubb, W. N. (1993). The varied economic returns to postsecondary education: new evidence from the class of 1972. Journal of Human Resources, 28(2), 365-382.
- Haller, A. O., & Portes, A. (Winter 1973). Status attainment process. Sociology of Education, 46, 51-91.
- Hanson, S. (1994, July). Lost talent: Unrealized educational aspirations and expectations among U.S. youths. Sociology of Education, 67, 159-183.
- Hauser, R. M. (1970). Education stratification in the United States. Sociological Inquiry, 40, 102-129.
- Hauser, R. M., Tsai, S-L., & Sewell, W. H. (1983, January). A model of stratification with response error in social and psychological variables. Sociology of Education, 56, 20-46.
- Kerckhoff, A. C., & Huff, J. L. (1974). Parental influence on educational goals. Sociometry, 37(3), 307-327.
- Land, K. C. (1969). Principle of path analysis. In E. F. Borgalita (Ed.). Sociological Methodology. San Francisco: Jossey-Bass.

Marini, M. M. (1978). The transition to adulthood: Sex differences in educational attainment and age at marriage. American Sociological Review, 43, 483-507.

McClendon, M. J. (1976). The occupational status attainment processes of males and females. American Sociological Review, 41, 52-64.

National Center for Educational Statistics (NCES). (1977). National longitudinal study of the high school class of 1972 - sample design efficiency study. Washington, DC: U.S. Government Printing Office.

Nesbitt, P. D. (1995). Marriage, parenthood, and the ministry: differential effects of marriage and family on male and female clergy careers. Sociology of Religion, 56(4), 397-415.

Pedhazur, E. J. (1982). Multiple regression in behavioral research. New York: Holt, Rinehart, and Winston.

Picou, J. S., & Carter, T. M. (1976). Significant-other influence and aspiration. Sociology of Education, 49, 12-22.

Pope, R. V. (1972). Factors affecting the elimination of women students. New York: AMS Press.

Rojewski, J. W. (1996). Educational and occupational aspirations of high school seniors with learning disabilities. Exceptional Children, 62(5), 463-476.

Sewell, W. H., Haller, A. O., & Portes, A. (1969). The educational and early occupational attainment process. American Sociological Review, 34, 82-92.

Sewell, W. H., & Hauser, R. M. (1975). Education, occupation, and earning: Achievement in the early career. New York: Academic Press.

Sewell, W. H., & Hauser, R. M. (1980). The Wisconsin longitudinal study of social and psychological factors in aspirations and achievement. Research in Sociology of Education and Socialization, 1, 59-99.

Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models, In S. Leinhardt (Ed.), Sociological Methodology (pp. 290-312). San Francisco: Jossey-Bass.

Stoecker, J. L., & Pascarella, E. T. (1991). Women's colleges and women's career attainments revisited. Journal of Higher Education, 62(4), 394-411.

Spaeth, M.G., & Greeley, A. M. (1970). Recent Alumni and Higher Education. New York: McGraw-Hill.

Treiman, D. J., & Terrell, K. (1975). Sex and the process of status attainment: A comparison of working women and men. American Sociological Review, 40, 174-200.

Woelfel, J. (1972). Significant others and their role relationships to students in a high school population. Rural Sociology, 37(1), 86-97.

Wolfle, L. M., & Ethington, C. A. (1985). GEMINI: Program for analysis of structural equations with standard errors of indirect effects. Behavior Research Methods, Instrument, and Computers, 17(5), 581-584.



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