

DOCUMENT RESUME

ED 107 734

UD 015 125

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TITLE Facial Models of the Consistency of Occupational Status Projections: Submodeling Using the Heise Path-Panel Method. Preliminary Draft.

SPONS AGENCY Department of Agriculture, Washington, D.C.; Texas A and M Univ., College Station. Texas Agricultural Experiment Station.

REPORT NO TAPS-H-2811; USDA-CSPS-P-S-81
PUB DATE Mar 73
NOTE 36p.; Paper presented at the Annual Meeting of the Southwestern Sociological Association (Dallas, Texas, March 1973)

EDRS PRICE MF-\$0.76 HC-\$1.95 PLUS POSTAGE
DESCRIPTORS Caucasians; *Critical Path Method; Demography; Economic Factors; Expectation; Individual Characteristics; Longitudinal Studies; *Models; Negro Youth; *Occupational Aspiration; Occupational Surveys; Racial Differences; *Rural Youth; *Social Mobility; Southern States

IDENTIFIERS Texas

ABSTRACT

This report focused on the goal of investigating, within a path analytic framework, the stability and interplay of two occupational status projection variables in a Texas sample. More specifically, the dynamics of occupational aspirations and occupational expectations, observed in a three-wave rural youth panel, were analyzed using the two-variable, path analytic technique for panel data developed by Heise. Standardized data were collected in a six year, three-wave panel of youth from six southern states. Levels of occupational aspirations and expectations were operationalized as follows. Occupational aspirations were determined by written responses to the open-ended question, "If you were completely free to choose any job, what would you most desire as a lifetime job?" Occupational expectations were similarly determined. The analysis generally supported the strategy of racial submodeling of mobility processes. That is, the dynamics of occupational aspirations and expectations in the black panel differed sufficiently from the dynamics of the white panel that the composite model would obscure the nature of the change. Findings also supported the contention that status projections are highly dynamic phenomena subject to process submodeling. (Author/JM)

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RACIAL MODELS OF THE CONSISTENCY OF OCCUPATIONAL
STATUS PROJECTIONS: SUBMODELING^{1,2}
USING THE HEISE PATH-PANEL METHOD^{1,2}

By

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¹Paper presented at the Southwestern Sociological Association Meeting,
Dallas, Texas, March 1973. Development of this paper was sponsored by the
Texas Agricultural Experiment Station as a contribution to TAES Project
H-2811 and USDA (CSRS) Research Project S-81, "Development of Human Resource
Potentials of Rural Youth in the South and Their Patterns of Mobility."
Appreciation is expressed to George Ohlendorf, James Darby, Randi Cole,
and Robin Phillips for their helpful suggestions.

²Technical Article No. ____ of the Texas Agricultural Experiment Station.

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UD 015125

RACIAL MODELS OF THE CONSISTENCY OF OCCUPATIONAL STATUS PROJECTIONS : SUBMODELING USING THE HEISE PATH-PANEL METHOD

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INTRODUCTION

In recent years, the sociological investigation of racial differentials in patterns of social mobility has become a major research enterprise. Such leaders in this effort as Duncan and his colleagues (Blau and Duncan, 1967; Duncan, Featherman, and Duncan, 1968; Duncan 1968a; Duncan 1968b) have documented the structural nature of Black - White differences. One general implication of their research has been that the mobility characterizing Blacks in the United States differ sufficiently from processes that of the White population that, in order to explain the complex processes operant in the U.S. stratification structure, parallel Black and White mobility models need to be constructed.

Interestingly, a similar and apparently independent research development has been the racial modeling of such mobility-linked, social psychological factors as occupational and educational status projections (i.e., occupational and educational aspirations). For example, recent studies by Gordon (1971), Cosby and Picou (1972), Picou et al. (1972), Carter et al. (1972), and Cosby and Picou (1973) have demonstrated increased explanatory power by viewing Black and White youth as distinct populations for analytical purposes and by constructing separate models for each. One consistent finding of these various projection reports has been the observation that models designed

to explain occupational formation (usually aspirations), when applied to White populations, accounted for larger portions of the variation in attitudes than was the case when the same models were applied to corresponding Black populations. These findings seem to encourage not only the parallel modeling of social mobility processes but also strongly suggest that we have a poorer understanding of mobility processes among Blacks.

Carter and his associates (1972) correctly observed, in our opinion, that a more focused and potentially more efficient approach to the difficult task of submodeling Black and White mobility processes would be to apply the strategy utilized by Sewell and his colleagues in their "status attainment research" (Sewell, Haller, and Portes, 1969; Sewell, Haller and Ohlendorf, 1970). This approach, which has come to be labeled the "Wisconsin Model," can be viewed as a combination of social structural and social psychological modeling within a path analytical framework. That is, the model is based on a three phase contention that background variables (relatively fixed contextual factors such as parental socioeconomic status and intelligence) exert influences on attainment that are mediated by a set of social psychological factors (significant other influences, academic performance, occupational aspirations and educational aspirations). Generally, the model posits a causal flow from parental socioeconomic status and intelligence to significant others' influence and academic performance, and from significant others' influence and academic performance to occupational aspirations and occupational expectations and ultimately to educational and occupational attainment. Unfortunately, the Wisconsin Model has been applied only to predominantly White panels of Wisconsin subjects and thus its potential for racial submodeling remains problematic. In addition, it appears that the data required for racial modeling within the Wisconsin framework has not previously been available

[Carter et al. (1972) have made a similar evaluation]. For a discussion of the conceptual and methodological differences between traditional social mobility studies and the emerging approach referred to as status attainment research see the essay by Carter and Carter (1971).

THE SOUTHERN YOUTH STUDY STRATEGY FOR CONSTRUCTING PARALLEL RACIAL ATTAINMENT MODELS

Although the limited objective of this paper was to report the construction of submodels by race for only one component of the "status attainment process," a brief description of the broader research goal should be included in order to make explicit the intended use of the resulting submodels. The submodels reported here were designed for inclusion in yet-to-be-constructed parallel status attainment models for both Black and White southern youth populations. The research project has available for analysis standardized data collected in a six year, three-wave panel of youth from six southern states. The regional data set includes ecological and economic measures as well as the contextual, social psychological, and attainment data required in the Wisconsin Model.

The strategy of the larger research project has centered around three general assumptions: (1) the "status attainment process" is so complex that component-by-component modeling, as often used in the simulation of large systems, would prove to be a prudent approach; (2) many aspects of the phenomena which have been treated as single variables in existing models represent an oversimplification of the reality of the process and instead should be treated as dynamic multi-variate components subject to submodeling; and (3) the inclusion of ecological and economic influences should improve the generality and efficiency of the resulting models.

THE PROBLEM: RACIAL SUBMODELING OF OCCUPATIONAL STATUS PROJECTIONS

This report focused on the intermediate submodeling goal of investigations, within a path analytic framework, the stability and interplay of two occupational status projection variables in the Texas panel. More specifically, the dynamics of occupational aspirations and occupational expectations, observed in a three-wave, rural youth panel, were analyzed using the two-variable, path analytic technique for panel data developed by Heise (1970).

The rationale for selecting this limited aspect of the general status attainment problem was based primarily on two considerations. First, if we can assume that aspirations and expectations were, in fact, highly dynamic (and existing theory and research does support this contention) it would follow that an improved knowledge of the dynamics within an explicit modeling framework would appear essential to the construction of more powerful, general process models. Put differently, evidence has indicated that status projections demonstrate substantial variation both in the static situation (one-wave designs), with respect to levels of other variables, and in the dynamic situation (multi-wave, repeated measurement designs), with respect to time. This second type of variation has received little attention in current models and, consequently, is poorly understood. Thus, it would follow that modeling taking into account this second type of variation would promise gains, however meager, in knowledge of attainment processes. Second, the analysis of the dynamics of status projections, aside from considerations of actual status attainment, represented a worthwhile goal of sociological inquiry.

It should be considered here that numerous theoretical treatments developed both in sociology and other disciplines have viewed occupational projections as highly variable

and generally stress the dynamics of the phenomena (e.g., see Ginzberg, et al., 1951; Super, 1953; Beilin, 1953; Tiedeman, 1961; Musgrave, 1967; Kuvlesky, 1970). Ginzberg - like explanations of change in status projections that stress a shift from early fantasy (goal-centered) choices of pre-and early adolescence to more realistic (means-centered) choices of late adolescence and early adulthood typify such formulations.

Whatever the relative merit of these formulations, there appears to be consistent agreement among these theorists on the dynamic nature of projections. In addition, several research reports, largely descriptive, have indicated that occupational status projections were highly dynamic among school age youth. For example, Carmody (1972) found in a four year follow-up of over 2000 male students that 63% had changed their occupational choices. Similar findings have been reported for occupational expectations in a rural youth panel (Cosby, et al., 1972).

CONCEPTUALIZATION AND MEASUREMENT OF OCCUPATIONAL STATUS PROJECTIONS: OCCUPATIONAL ASPIRATIONS AND EXPECTATIONS

As previously stated, this report was concerned with two occupational status projection variables : occupational aspirations and expectations. The conceptualization of the two variables follows closely the position taken in the article by Kuvlesky and Bealer (1966). As they conceptualized them, aspirations and expectations are viewed as distinct phenomena which can be differentiated both conceptually and empirically. Occupational aspirations are defined as a person's or group's orientation toward an occupational goal. The concept can be further differentiated into three components: (1) a chooser or selector element, (2) a wanting or desiring element and (3) an occupational goal(s). Occupational expectations, on the other hand, refer to an individual's estimation of the likelihood of attainment of an occupational object(s). Like the aspiration concept, three aspects of expectations can also be distinguished: (1) a chooser

or selector element, (2) an estimation of probable attainment and (3) an occupational object(s).

The fundamental difference between the concepts is the nature of the orientational component. By definition, the orientational component of an aspiration is essentially positive, a wanting or desire, whereas expectations may be either positive or negative. That is, an individual need not necessarily desire his anticipated or expected occupational attainment. This conceptual treatment, of course, is not new and has been utilized in numerous studies (e.g., Slocum, 1956; Stephenson, 1957; Nunalee & Drabick, 1965; Glick, 1962; Kuvlesky and Ohlendorf, 1968). In addition, the recent annotated bibliography by Cosby et al. (1973) reviewed over fifty research reports conducted in the South that used this framework.

The operational procedures that were used to measure levels of occupational aspirations and expectations were as follows. Occupational aspirations were determined by written responses to the open-ended question, "If you were completely free to choose any job, what would you most desire as a lifetime job?" Additional information for coding was obtained from responses to a list of items designed to ascertain the type of work indicated in the above question. Each response was then assigned a scale value according to Duncan's Socioeconomic Index (Duncan, 1961). Occupational expectations were similarly determined by responses to the question, "Sometimes we are not always able to do what we want most. What kind of job do you really expect to have most of your life?" Similar operational procedures for coding of occupational responses were used in the construction of the "Wisconsin Model" and in the social psychological model reported by Carter (1972).

DATA COLLECTION: THE TEXAS PANEL

The data set utilized in this analysis was collected from a three-wave panel of

East Texas rural youth over a six year period (1966-1972). The panel consisted of 152 males who had originally (1966) been high school sophomores in three rural Texas counties. Wave by-wave data collection procedures were as follows:

(a) Wave I (Spring, 1966). Group-administered questionnaires were given to all tenth-grade high school students present the day of the interview. The high schools selected were in three counties which were classified as 100% rural according to the 1960 census.

(b) Wave II (Spring, 1968). A second contact was made with the respondents previously interviewed in 1966. The majority of the Wave II data was collected by again using group-administered interview schedules with the items contained in this period worded the same as the previous period. Attempts were also made to contact those respondents who had either moved from their original counties or who had dropped out of school ; personal interviews and/or mailed questionnaires were used with these respondents. Eighty-nine percent of the Wave I panel was interviewed by these combined techniques. Panel attrition was largely attributed to scholastic dropouts -- approximately one-half of the Wave II losses were high school dropouts.

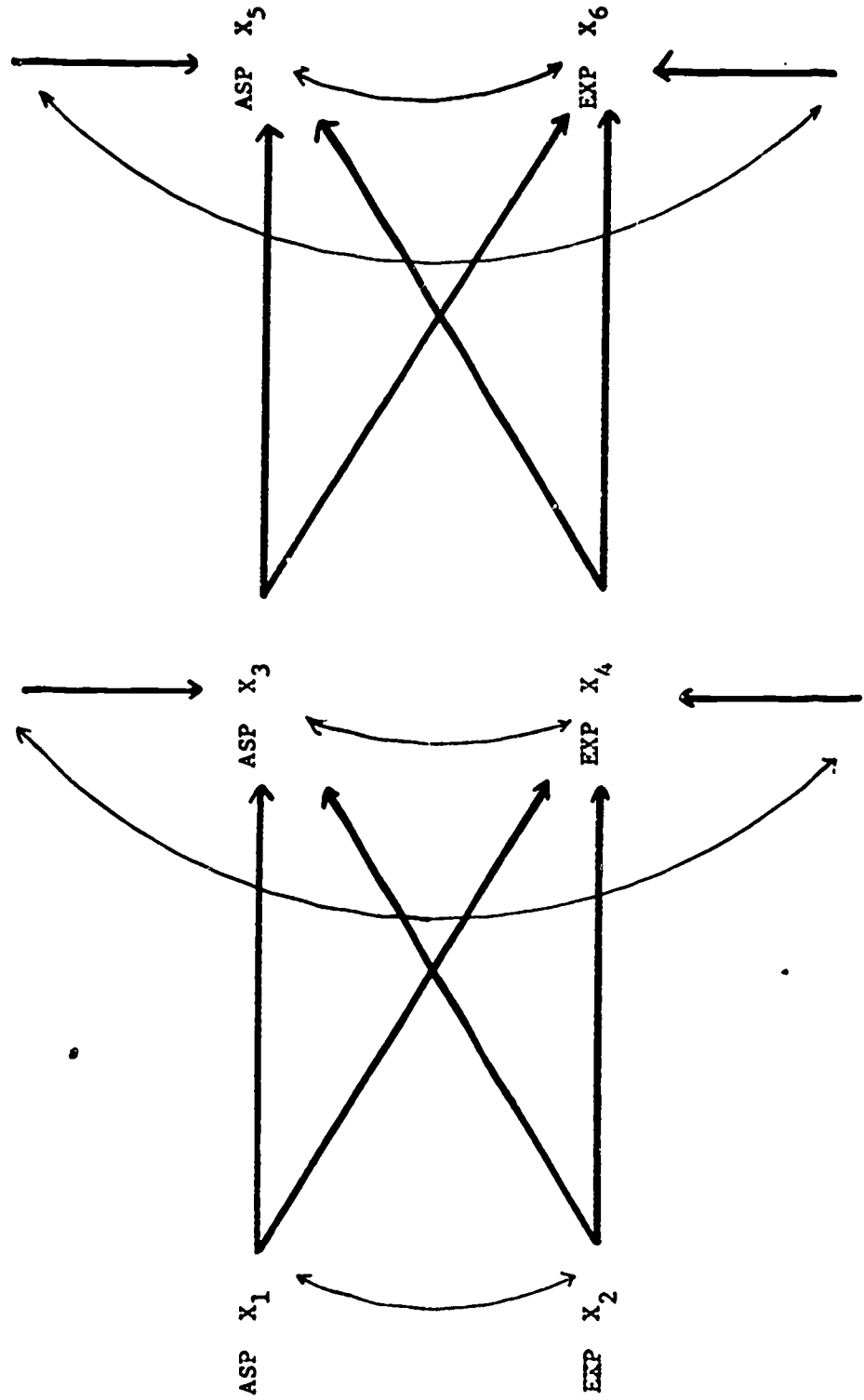
(c) Wave III (Summer-Fall, 1972). The third contact was made in 1972 when the original respondents were four years beyond expected high school completion. These measures for this period were primarily obtained by personal interview. Mailed questionnaires and telephone interviews were used for a minority (15%) of the respondents who were not interviewed by the primary method. Approximately 92% of the Wave II panel were recontacted by all methods. The principal cause of panel attrition appeared to be out-of-state migration and military service.

DEVELOPMENT OF THE MODEL: THE HEISE APPROACH

The modeling technique applied in this research was an adaptation of the path-analytic method developed by David Heise (1970) for analysts of panel data. Heise designed a path-analytic method to deal with the consistency and cross-lag effects in a two-wave, two-variable panel design. [NOTE: See Pelz and Lew (1970) for an evaluation of the utility of the Heise Model using simulated data, and Pelz and Andrews (1964) for a discussion of the closely related method of cross-lag correlations.] The main departure in our modeling from that developed by Heise was a simple extension of the technique from a two-wave, two-variable model to a three-wave, two-variable model. The three-wave, two-variable model was then applied alternately to the total male panel, the Black male panel, and the White male panel for comparative purposes. To our knowledge, this research represents one of the first, if not the first, applications of the Heise method to empirical data.

Following Heise, our submodel treated the same variables observed in each wave as hypothetically different variables. Thus, in our submodel (See the general case in Illustration 1), X-odd variables (X_1, X_3, X_5) referred to occupational aspiration values measured at each of the three waves and similarly, X-even variables (X_2, X_4, X_6) corresponded to occupational expectations measured at each of the three waves. Using this arrangement, the three-wave, two-variable design resulted in a submodel with six hypothetical variables. It was obvious (and theoretically desirable) that all possible paths in a six variable submodel could not be computed (See Heise, 1969; Heise, 1970). Fortunately, however, the introduction of a set of assumptions, discussed in some detail by Heise, which are isomorphic with the notion of causation in time-ordered data allowed a theoretically agreeable solution. First, the assumption of temporal asymmetry of effects was made so that later states of a variable could not influence earlier states. Thus, it was assumed that occupational aspiration levels in Wave III (1972) did not effect levels of the variables in either Wave II (1968) or Wave I (1966) and that levels in Wave II (1968) did not effect levels in Wave I (1966). The application of this assumption eliminated the following twelve paths: ($X_6 \rightarrow X_{1,2,3,4}$; $X_5 \rightarrow X_{1,2,3,4}$; $X_4 \rightarrow X_{1,2}$; and $X_3 \rightarrow X_{1,2}$). Second, it was assumed that effects did not occur instantaneously but rather after some finite time period. Therefore, it was assumed that aspirations and expectations measured in the same wave did not effect each other but instead that effects were cross-lagged across waves. The generalization of this assumption resulted in the deletion of six additional paths ($X_1 \rightarrow X_2$; $X_2 \rightarrow X_1$; $X_3 \rightarrow X_4$; $X_4 \rightarrow X_3$; $X_5 \rightarrow X_6$; and $X_6 \rightarrow X_5$). Third, since the study was designed to analyze the wave-by-wave consistency and cross-lag

Illustration 1. The Three-Wave, Two-Variable Model



effects, the four paths that skip Wave II ($X_1 \rightarrow X_{5,6}$ and $X_2 \rightarrow X_{5,6}$) were also deleted.

The application of the aforementioned set of assumptions and the related deletion of paths resulted in the three-wave, two-variable model which appears as Illustration 1. The paths in this model lead to two types of interpretation. First, one set of paths were interpreted as estimates of the consistency or stability of each type variable from wave to wave. Paths from aspirations to aspirations (X-odd to X-odd variables) and expectations to expectations (X-even to X-even variables) were interpreted as estimates of consistency or stability. Second, the cross-lag paths (X-odd to X-even variables and X-even to X-odd variables) were interpreted as estimates of the effects of aspirations on expectations and expectations on aspirations. These interpretations of estimates were in agreement with the Heise Model (1970) and with the earlier work on cross-lag correlations by Pelz and Andrews (1964).

Several additional modeling considerations should be briefly discussed. First, since the submodeling was by race and since a greater proportion of Black youth had lower parental SEI scores, it was anticipated that class-linked influences might confound the racial comparisons. In order to partially control for parental SEI influences, youth with parental SEI scores less than 45 Duncan increments were deleted from the submodeling. Second, the unstandardized regression coefficients were also computed for Black-White submodel comparisons. Because of the measurements used and the similarities of variances, however, the magnitude of the unstandardized regression coefficients closely approximated the corresponding path values (See Tables 3, 6, and 9). In this case, comparison of Black and White submodels using either estimates would lead to similar results. Third, path

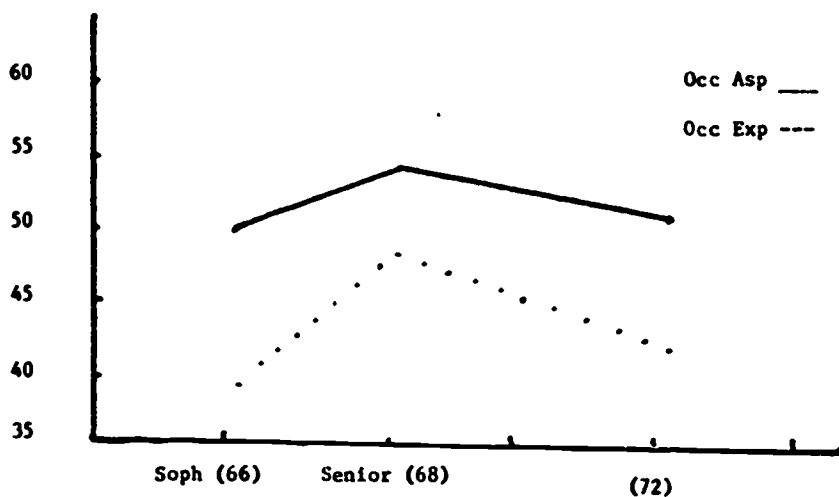
values that were both greater than .10 and greater than one and one half times their standard deviations were considered to be of sufficient magnitude to indicate effect.

ANALYSIS OF DATA

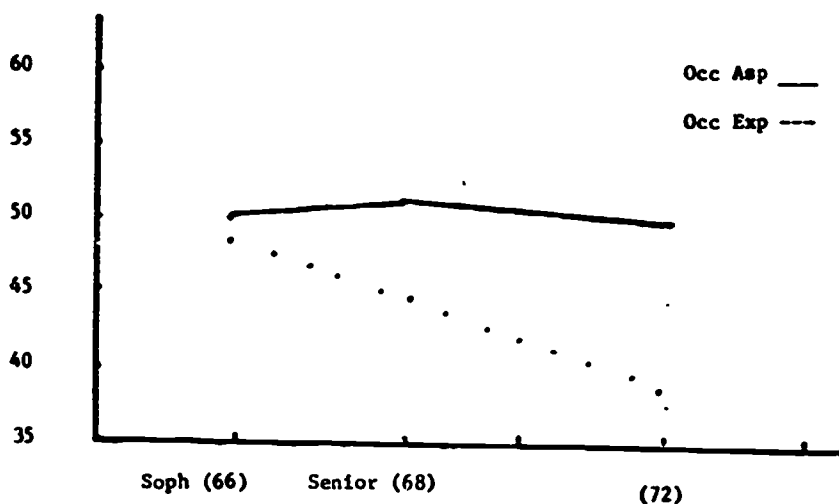
(1) The mean occupational aspirations and expectations value, with the corresponding standard deviations for the total male panel at each of the three waves, are reported in Table 1. A consistent direction of aggregate change was not observed for either aspirations (X-odds) or expectations (X-evens). The largest mean values for both aspirations ($\bar{X}_3 = 53.63$) and expectations ($\bar{X}_4 = 47.05$) were obtained in the intermediate or senior year wave. The data did not reveal a consistent temporal trend toward an increase or decrease in either type projection. There was, however, a tendency for the differences between aspiration and expectation means to increase over time ($\bar{X}_1 - \bar{X}_2 = 5.71$; $\bar{X}_3 - \bar{X}_4 = 6.56$; and $\bar{X}_5 - \bar{X}_6 = 11.55$). These changes represent an increase of 15 percent between Wave I and Wave II and an increase of 76 percent from Wave II to Wave III. Although this pattern obviously suggested a trend toward an age-linked or developmental increase in the differentiation of aspirations and expectations, such interpretations should be made with caution since the values were based on aggregate rather than individual measures and the extent of measurement error was unknown.

(2) A comparison of means and standard deviations of Black and White subsets of the data was made by inspecting Table 4 for the Black subset and Table 7 for the White subset (also see Graph I). Markedly different patterns of change emerged. First, for the Black subset, the mean aspiration value remained approximately constant at each wave ($\bar{X}_1 = 48.80$; $\bar{X}_3 = 48.32$ and $\bar{X}_5 = 49.98$). Black expectations on the other hand, started in Wave I

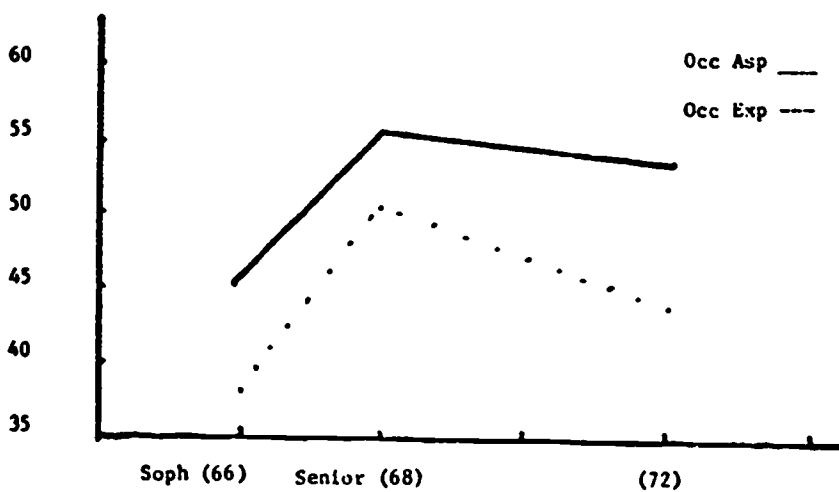
Graph 1. Mean Occupational Aspirations and Expectations Values Across Three Waves for Total Male Panel (Model I)



Graph 2. Mean Occupational Aspirations and Expectations Values Across Three Waves for Black Male Panel (Model II)



Graph 3. Mean Occupational Aspirations and Expectations Values Across Three Waves for White Male Panel (Model III)



at about the same level as aspirations ($\bar{X}_2 = 47.91$) and then decreased at each subsequent wave ($\bar{X}_3 = 42.83$ and $\bar{X}_5 = 35.59$). As would follow, the differences between aspirations and expectations started quite small and steadily increased ($\bar{X}_1 - \bar{X}_2 = 0.89$; $\bar{X}_3 - \bar{X}_4 = 5.48$, and $\bar{X}_5 - \bar{X}_6 = 14.39$). Thus, for Black youth a clear pattern of change was observed with (1) mean levels of occupational aspirations holding constant within the range of the data, (2) mean levels of occupational expectations decreasing steadily from wave-to-wave, and (3) the difference between occupational aspirations and expectations sharply increasing across waves.

(3) The pattern of mean change in the two variables for the White panel was found to vary considerably from that of the Black panel. Neither variable was found to have a consistent direction of change. The largest mean values for both aspirations and expectations were obtained in Wave II data ($\bar{X}_3 = 53.77$ and $\bar{X}_4 = 48.45$). Generally aspirations started relatively low, increased by Wave II and then appeared to stabilize. Expectations, on the hand, were quite low in Wave I ($\bar{X}_2 = 35.81$), increased sharply by Wave II ($\bar{X}_4 = 48.45$), and then decreased by Wave III ($\bar{X}_6 = 43.42$). Graphs 1, 2, and 3 were provided to assist in the comparisons of patterns of aggregate change for the total, Black and White data sets.

(4) Simple correlation matrices for Model I (Total Male Panel), Model II (Black Male Panel < 45), and Model III (White Male Panel < 45) are reported respectively in Tables 2, 5 and 8. By inspecting the various correlation matrices, three anticipated patterns among the coefficients could be generally discerned. First, correlations between aspirations and expectations measured at the same waves (r_{12} , r_{34} and r_{56}) were consistently found to be among the largest coefficients reported in the various tables.

This result was viewed as an indication of the relatedness and overlap of the two types of status projections at these points in development. Second, correlations between variables in Wave I and Wave II and correlations between variables in Wave II and Wave III were generally larger than the corresponding correlations between variables in Wave I and Wave III (the exception was $r_{16} = .27$ for the Black Male Panel). Thus, there was a time-linked pattern, apparently developmental, for the degree of association between projections to diminish across waves. Third, consistency correlations (correlations between either aspirations and aspirations or between expectations and expectations) were generally larger than cross-lagged correlations (across-wave correlations between aspirations and expectations or between expectations and aspirations). That is, across-time correlations between like variables were generally larger than correlations between related variables. It should be pointed out that considerably more deviations from the third pattern occurred than was the case for the first two.

(5) The diagram for the three-wave, two-variable submodel applied to the total male panel is presented as Model I (see appendix). Each path coefficient in the model was found to be both greater than .10 and 1 1/2 its standard error and thus was considered to have sufficient magnitude to indicate effect. As occurred in the previous analysis, several patterns emerged. First, and perhaps the most apparent of these, was the similarity in the multiple correlation coefficients associated for both aspirations and expectations observed in Waves II and III ($R_{3.21} = .52$, $R_{4.21} = .47$, $R_{5.34} = .50$ and $R_{6.34} = .50$). This indicated that approximately one-fourth of the variation in each projection measure could be explained by levels of the variables at the just-prior wave ($R_3^2 = .267$, $R_4^2 = .223$, $R_5^2 = .249$ and $R_6^2 =$

.252). Second, the consistency paths (ρ_{31} , ρ_{53} , ρ_{42} , and ρ_{64}) were all larger than the cross-lag paths (ρ_{32} , ρ_{41} , ρ_{54} and ρ_{63}). The magnitude of the consistency paths at the various waves suggests that (1) both aspirations and expectations were moderately stable within the range of the data and (2) that between Waves II and III occupational expectations had become more stable than aspirations ($\rho_{64} = .43$ whereas $\rho_{53} = .31$). Third, an examination of the cross-lagged paths revealed stronger effects from expectations to aspirations than from aspirations to expectations. That is, although both types of projections exerted cross-lag influences, the data suggested a priority of expectations.

(6) The submodel applied to the Black male panel was reported as Model II. Multiple correlation coefficients for Wave II and Wave III variables were as follows: aspirations 68, $R_{3.12} = .47$; expectations 68, $R_{4.12} = .37$; aspirations 1972, $R_{5.34} = .47$ and $R_{6.34} = .48$). Correspondingly the amount of explained variation for each variable was less than observed in the total panel submodel ($R_3^2 = .224$, $R_4^2 = .137$, $R_5^2 = .223$ and $R_6^2 = .231$). The main point of difference was for expectations -- the Black submodel manifested 10 per cent less explained variation for senior expectations. The consistency paths were of similar magnitude to that observed in the total panel. A much higher degree of stability was observed for expectations between Wave II and Wave III ($\rho_{64} = .45$) than for aspirations over the same period ($\rho_{53} = .28$). A comparison of cross-lagged paths revealed an interesting pattern. Between Waves I and II and Waves II and III, the path coefficients from aspirations to expectations ($\rho_{41} = .04$ and $\rho_{63} = .05$) were found to approach zero indicating lack of effect. The lagged paths from expectations were of sufficient magnitude to denote effect. This finding supports a position that posits a

"causal priority" of expectations over aspirations in the dynamics of Black status projections.

(7) The White male submodel was presented as Model III. Multiple correlations for the White panel were larger than those found for the total male and Black submodels ($R_{3.21} = .52$, $R_{4.21} = .54$, $R_{5.34} = .58$, and $R_{6.34} = .55$). Correspondingly, the degree of explained variation in each case was greater than (in one case equal to) that obtained in Model I and Model II. Consistency paths between Wave I and II differed little from the earlier submodels. However, between Wave II and III, aspirations ($\rho_{53} = .43$) were more stable than expectations ($\rho_{64} = .32$) -- a reverse pattern from that observed in the Black panel. Also the relation between cross-lagged paths differed sharply. Both paths from expectations to aspirations ($\rho_{32} = .26$ and $\rho_{54} = .21$) and paths from aspirations to expectations ($\rho_{41} = .24$ and $\rho_{63} = .29$) were found to have effect. In fact, instead of approaching zero, as was the case for the Black panel, aspirations to expectations paths were slightly larger than the other cross-lagged paths from expectations to aspirations.

IMPLICATIONS

It should be recalled that the stated purpose of the research reported in this paper was to develop submodels to be incorporated in a yet-to-be developed status attainment model. The implications will be discussed in terms of that goal. First, the analysis generally supports the strategy of racial submodeling of mobility processes. That is, the dynamics of occupational aspirations and expectations in the Black panel differed sufficiently from the dynamics of the White panel that the composite model (Model I) would obscure the nature of the change. This conclusion was supported by (1) the sharply differing patterns of change observed in the aggregate measures (means and graphs), (2) the finding that the White submodel resulted

in higher levels of explained variation than the Black submodel, (3) the finding that stability patterns differed in each model and (4) the finding that expectations for Blacks appeared to exert effect on subsequent wave level of both aspirations and expectations whereas in the white model, both aspirations and expectations had such cross-lagged effects.

Second, the finding also supports the contention that status projections (occupational aspirations and expectations in this case) are highly dynamic phenomena subject to process submodeling. The finding that consistency coefficients were less than .50 in all instances strongly suggests that treating aspirations or expectations as static variables in general process models leads to an over-simplification of the nature of the process. Obviously, if sophomore, senior or senior +4 years observations were used alternately in general process models quite different effects could result.

At the outset of this paper, reference was made to the work of Kuvlesky and Bealer and others who have conceptually distinguished between aspirations and expectations. The data reported in this paper provide further support for conceptually distinguishing these two phenomena. In the present paper aspirations and expectations have been shown to be dynamic and highly variable; consequently, treatment of them as one phenomenon would be an oversimplification. It could be posited that if other researchers (in particular, Sewell et al.) studying the status attainment process were to utilize the aspiration-expectation distinction used here, they would find different effects within their path models than they presently show.

One final point of discussion is warranted. The present research, similar to other related research, reports racial differences in levels of projections. Since racial differences do continue to be observed, this would

seem to support the argument not only for racial models but also for the notion of submodeling. Given the complex nature of the status attainment process, and the seemingly equally complex nature of the elements within it, a good case can be made for submodeling. If more emphasis is placed on exhaustively detailing the conceptual elements of the status attainment process and developing appropriate submodels for the explanation of these elements, appreciable gains in developing an explanatory model and corollary theory of the status attainment process might be facilitated. At least this is our hope as we evaluate our own work and overview the state of theory development in status attainment.

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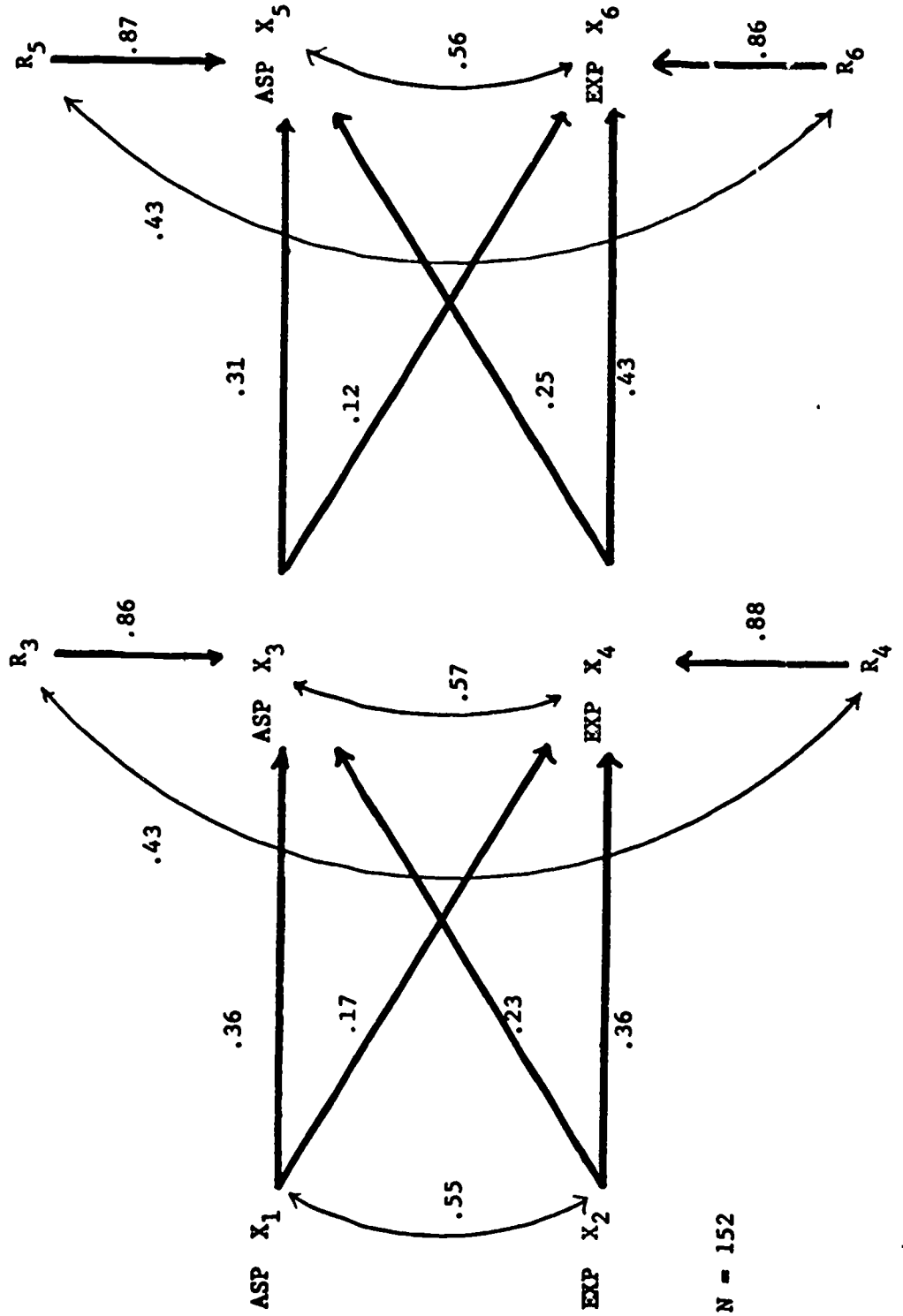
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Model I. Dynamics of Occupational Aspirations and Expectations for the Total Male

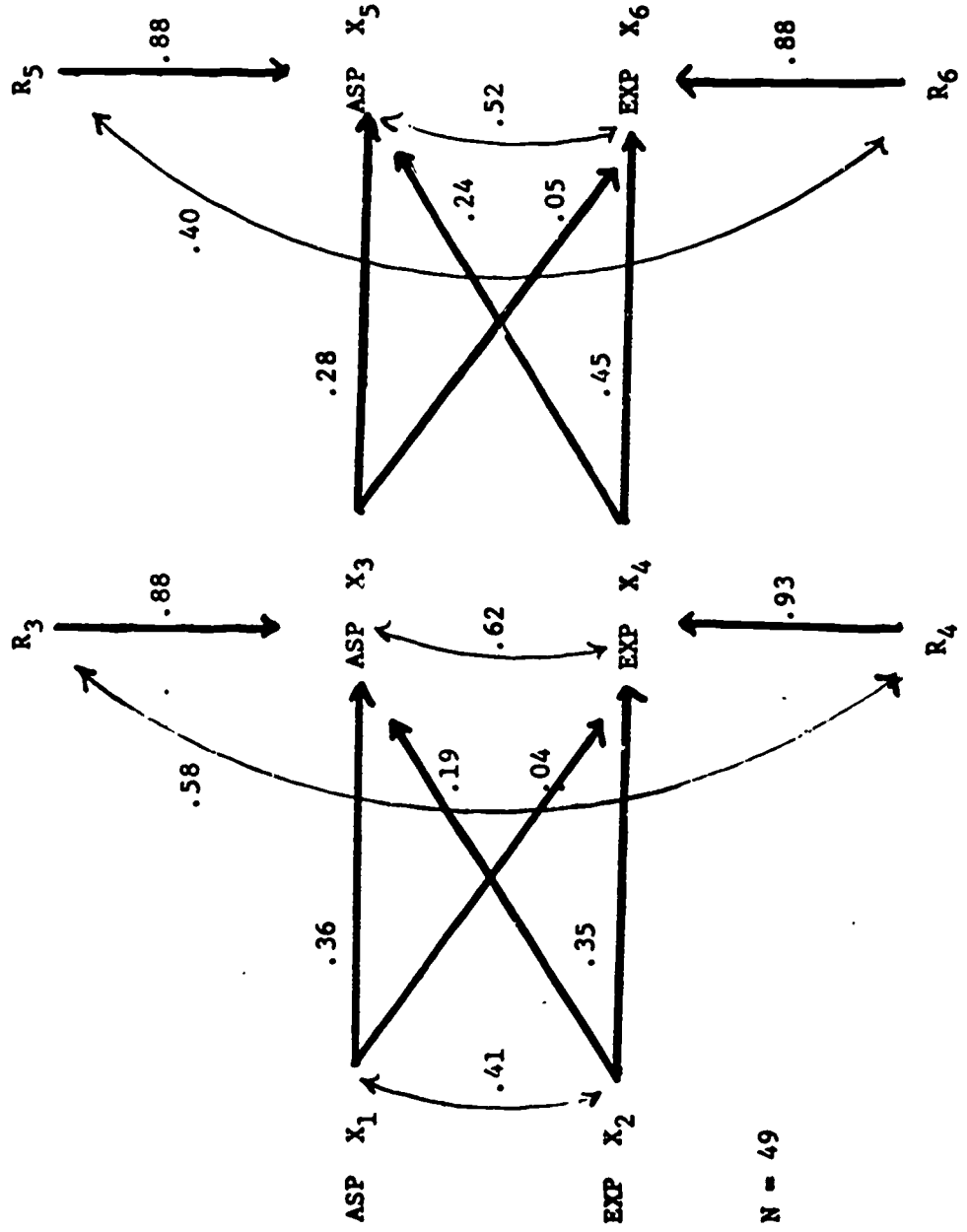
Panel.



N = 152

Model II. Dynamics of Occupational Aspirations and Expectations for the Black Male

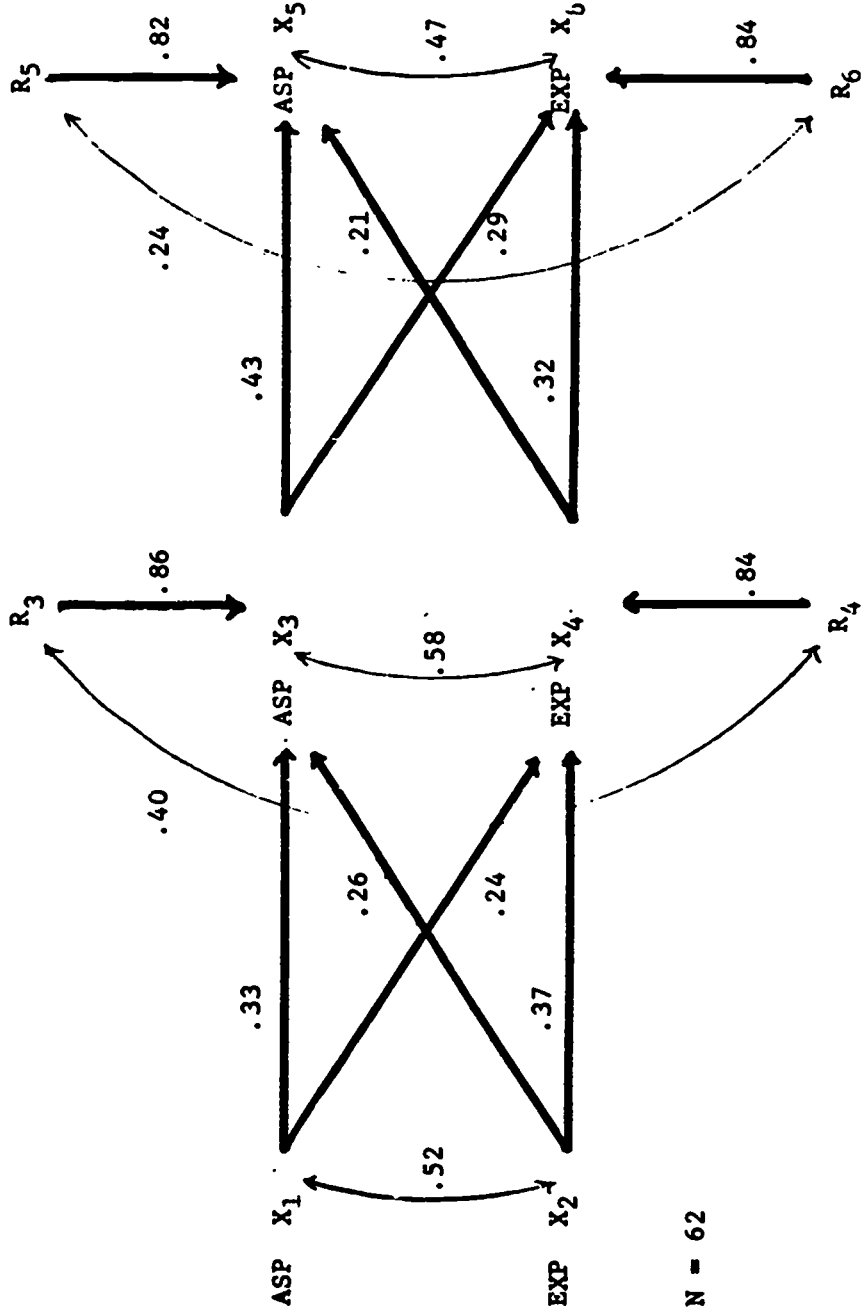
Panel with Parental SEI less than 45.



N = 49

Model III. Dynamics of Occupational Aspirations and Expectations for the White Male

Panel with Parental SEI less than 45.



N = 62

TABLE 1. Means and Standard Deviations of Occupational Aspirations and Expectations Across Three Waves for the Total Male Panel (Model I).

	Sophomores 1966	Seniors 1968	Seniors +4 Years 1972
Occupational	$\bar{X}_1 = 48.25$	$\bar{X}_3 = 53.63$	$\bar{X}_5 = 53.19$
Aspirations	S.D. $\cdot X_1 = 25.85$	S.D. $\cdot X_3 = 25.31$	S.D. $\cdot X_5 = 25.31$
Occupational	$\bar{X}_2 = 42.54$	$\bar{X}_4 = 47.07$	$\bar{X}_6 = 41.64$
Expectations	S.D. $\cdot X_2 = 26.30$	S.D. $\cdot X_4 = 26.85$	S.D. $\cdot X_6 = 25.00$

N = 152

TABLE 2. Correlation Matrix Between Occupational Aspirations and Expectations for Total Male Panel.
(Model I).

	ASP 1966 X ₁	EXP 1966 X ₂	ASP 1968 X ₃	EXP 1968 X ₄	ASP 1972 X ₅	EXP 1972 X ₆
ASP 1966 X ₁	—	.55	.48	.37	.18	.28
EXP 1966 X ₂		—	.42	.45	.25	.27
ASP 1968 X ₃			—	.57	.45	.49
EXP 1968 X ₄				—	.43	.49
ASP 1972 X ₅					—	.56
EXP 1972 X ₆						—

TABLE 3. Matrix of Unstandardized Regression Coefficients for the Total Male Panel (Model 1).

	X ₃ ASP 1968	X ₄ EXP 1968	X ₅ ASP 1972	X ₆ EXP 1972
X ₁ ASP 1966	.36	.17	—	—
X ₂ EXP 1966	.22	.37	—	—
X ₃ ASP 1968	—	—	.30	.11
X ₄ EXP 1968	—	—	.24	.40

TABLE 4. Means and Standard Deviations of Occupational Aspirations and Expectations Across Three Waves for the Black Male Panel (Model II).*

	Sophomores 1966	Seniors 1968	Seniors +4 Years 1972
Occupational	$\bar{X}_1 = 48.80$	$\bar{X}_3 = 48.32$	$X_5 = 49.98$
Aspirations	S.D. $\cdot X_1 = 27.04$	S.D. $\cdot X_3 = 26.64$	S.D. $\cdot X_5 = 24.05$
Occupational	$\bar{X}_2 = 47.91$	$\bar{X}_4 = 42.84$	$\bar{X}_6 = 35.59$
Expectations	S.D. $\cdot X_2 = 26.16$	S.D. $\cdot X_4 = 25.13$	S.D. $\cdot \bar{X}_6 = 23.40$

*Parental SEI < 45

N = 49

TABLE 5. Correlation Matrix Between Occupational Aspirations and Expectations for Black Male Panel (Model II).*

	ASP 1966 X ₁	EXP 1966 X ₂	ASP 1968 X ₃	EXP 1968 X ₄	ASP 1972 X ₅	EXP 1972 X ₆
ASP 1966 X ₁	—	.41	.44	.19	.05	.27
EXP 1966 X ₂		—	.34	.36	.06	.14
ASP 1968 X ₃			—	.62	.43	.33
EXP 1968 X ₄				—	.42	.48
ASP 1972 X ₅					—	.52
EXP 1972 X ₆						—

*Parent:1 SEI < 45.

TABLE 6. Matrix of Unstandardized Regression Coefficients for the Black Male Panel (Model II).*

	X ₃ ASP 1968	X ₄ EXP 1968	X ₅ ASP 1972	X ₆ EXP 1972
X ₁ ASP 1966	.36	.04		
X ₂ EXP 1966	.19	.34		
X ₃ ASP 1968			.26	.04
X ₄ EXP 1968			.23	.42

*Parental SEI < 45.

TABLE 7. Means and Standard Deviations of Occupational Aspirations and Expectations Across Three Wave for the White Male Panel (Model III).*

	Sophomores 1966	Seniors 1968	Seniors + 4 Years 1972
Occupational Aspirations	$\bar{X}_1 = 45.25$ S.D. $\cdot X_1 = 25.15$	$\bar{X}_3 = 53.77$ S.D. $\cdot X_3 = 25.11$	$\bar{X}_5 = 53.74$ S.D. $\cdot X_5 = 26.12$
Occupational Expectations	$\bar{X}_2 = 35.81$ S.D. $\cdot X_2 = 24.21$	$\bar{X}_4 = 48.45$ S.D. $\cdot X_4 = 27.24$	$\bar{X}_6 = 43.42$ S.D. $\cdot X_6 = 25.30$

*Parental SEI < 45

N = 62

TABLE 8. Correlation Matrix Between Occupational Aspirations and Expectations for the White Male Panel (Model III).

	ASP 1966 X ₁	EXP 1966 X ₂	ASP 1968 X ₃	EXP 1968 X ₄	ASP 1972 X ₅	EXP 1972 X ₆
ASP 1966 X ₁	—	.52	.46	.43	.02	.20
EXP 1966 X ₂		—	.43	.50	.23	.31
ASP 1968 X ₃			—	.58	.55	.48
EXP 1968 X ₄				—	.46	.44
ASP 1972 X ₅					—	.48
EXP 1972 X ₆						—

TABLE 9. Matrix of Unstandardized Regression Coefficients for the White Male Panel (Model III).

	X ₃ ASP 1968	X ₄ EXP 1968	X ₅ ASP 1972	X ₆ EXP 1972
X ₁ ASP 1966	.33	.26		
X ₂ EXP 1966	.27	.42		
X ₃ ASP 1968			.45	.30
X ₄ EXP 1968			.20	.30