The Utility of Social Psychological Variables as Predictors of Educational Aspirations

Bilby
THE UTILITY OF SOCIAL PSYCHOLOGICAL VARIABLES
AS PREDICTORS OF EDUCATIONAL ASPIRATIONS

by

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CHAPTER I
THE PROBLEM: THEORETICAL BACKGROUND AND RELATED LITERATURE

Statement of the Problem

For several decades sociologists, other social scientists, educators, and the general public have expressed concern about the development of aspirations among the young. A child's or adolescent's statements as to his hopes for himself, his wishes, his desires, are of more than tangential interest to all those who attempt to shape his life, as well as to those who merely wish to understand his development.

The problem, however, in spite of the considerable amount of research focused on aspiration development, is that to this day we are largely uninformed about those contingencies which most effect desires. This is not to contend that nothing is known in this area. As the following discussion and review of the literature will elaborate, we have considerable evidence of the associations between an individual's desires and certain socio-economic status characteristics, current performance levels, and "aptitudes." While we are somewhat unclear about the function of this set of variables, we are even more unclear about the relative contribution to desires made by other social structural and social-psychological variables. For instance, there have been various simple univariate analyses which purport to find that self-conceptualizations and perceptions...
of parental evaluations, the influence of teachers, and the influence of friends are related to the aspiration level of students.

Part of the trouble in understanding the influence of such variables is that seldom are they simultaneously taken into account in order to assess their additive effects; hence it is quite possible that many of these supposed factors are empirically redundant. Because of poor conceptual clarification it is also possible that some of these concepts are theoretically repetitious. We have not been guided by a law of parsimony leading us to find those best configurations of events that are most efficiently predictive of statements of aspiration made by youth.

This may be due to the nature of the research attempted by sociologists and others. Cross sectional studies are not well suited for constructing and testing child developmental models within which cause is implied. This failure to develop longitudinal studies in order to get sequential data on the same subjects is

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reflected by both the difficulty of such techniques and the lack of empirical and conceptual sophistication in this area as noted above. The propensity for social scientists to consistently look at very few variables in attempting to explain what might be a rather complex phenomenon limits the possibility of the researcher in this area. These factors all lead to and are compounded by a lack of forecasting which is, after all, one of the goals of science. From certain philosophy of science positions,¹ definitions of causality state that: given a change in event X, a change in event Y will occur, all other things being equal. If one has knowledge of this link between X and Y, he may therefore forecast Y on the basis of observing X. Forecasting does not determine causality from this perspective; it may, however, be a minimal condition. That is, if you could not forecast changes in Y from knowledge of changes in X (et ceterus paribus), one would not infer causality. The purpose of this study is to determine if certain child development events can be forecast on the basis of a knowledge of certain other characteristics which have been reported in the literature to produce these events (or at least such has been implied).

This study examines the forecasting efficiency of selected social structural and social-psychological variables against a criterion of traditionally established forecasters of aspirations.

It is the statement of aspiration, then, which constitutes the dependent variable in this study. The definition of aspiration is derived from the symbolic interactionist school of thought and the writings of Mead. As shown in the review of literature, there is a lack of conceptual clarity when dealing with the concept of aspiration. Some researches do not distinguish between aspirations and rather more concrete expectations for the future. Others distinguish between aspirations and plans or perceptions of the accessibility of the situation toward which the individual aspires. Following the findings of Brookover, et al., this study does not


confuse aspirations with plans, and focuses on accounting for the development of students' educational attainment aspirations for self.

In accord with the position of Lavin this study will determine whether certain social structural and social-psychological variables help in forecasting, as theorized, the educational aspirations of students over that which we can already account for with traditional variables. The traditional variables used to account for aspiration are socio-economic status, achievement, and intelligence. Socio-economic status (SES) is a social structural variable that has been found to be related to statements of aspiration. Achievement has been found to be related to aspiration. Intelligence (IQ) varies with aspirations to a degree which is significant, although the relationship is weaker than that between SES and aspirations. It is these three variables which make up the criterion against which


the forecasting efficiency of selected social-psychological variables will be assessed.

The social-psychological theorizing of Brookover and his associates\(^1\) and Kinch\(^2\) would suggest the use of the perceived expectations of others and the self-concept of academic ability as important variables in the determination of educational aspirations as this study will define them (see "Theoretical Background" section). More specifically, measures of the perceived expectations of parents, of teachers, and of peers will be used as independent variables in relation to statements of educational attainment aspirations for self.

To summarize, the major objective of this study is to determine the extent to which a set of basically social-psychological variables are explicative of statements of educational aspiration, both independently of and in conjunction with the more traditional variables of socio-economic status, achievement, and measured intelligence. The selected social-psychological variables used in this

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study are the perceived expectations of parents, of teachers, and of peers, and the individual's self-concept of academic ability. The following sections will provide theoretical background and justification for the use of the above variables, and review the relevant literature in this area.

Theoretical Considerations

The symbolic interactionist approach to human behavior, which directly evolved from the work of Mead,\(^1\) maintains that from the interaction of the human organism with the environment there emerges a consciousness unique to \textit{homo sapiens} which is best termed "self." The basic property of self is the ability of the organism to be aware, to objectify, to see itself as an object in the environment, to see its own behavior in the same manner as others see it. Language as an advanced form of communication present in man is the condition which enables man to gain this awareness. Conceptualizations the individual holds of himself can be seen as the product of the social processes and stimuli, some more relevant than others, from that social environment. A self-conception is not a static definition, rather it is a temporally and situationally varying perception of the functioning self within the context of the social existence of the individual.\(^2\) Aspirations may be seen as a category or type

\(^1\)Mead, op. cit.

of self-conceptualization. Aspirations are concerned with future activity; they are in form determined by the logical and symbolic structure of the language, in content garnered from the interaction with the social environment. The living human self comes to want to be something or someone in the future. People aspire to change their life situation in certain ways, or perhaps to extend their present situation into the future. Aspirations are the type of self-conceptualizations related to a desirable future self. An operational definition which would approximate the concept of "conceived desired future states for self" would specifically use the individual's linguistic expressions of his aspirations as an index of his desires, assuming that concepts by definition involve the use of language. In this study aspirations are operationally defined as statements using the standard language expressing desired future states of self. This study will be specifically concerned with statements of educational aspiration.

Since aspirations have been defined as part of the individual's self-concept structure, certain theoretical perspectives about the development of cognitions of self are used as a guide in the selec-

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1 The distinction between plans and aspirations as desires may be analogous to what Rogers refers to as the "real self" and the "ideal self." See Rogers, Carl, On Becoming A Person, Boston: Houghton Mifflin Company, 1961, pp. 161-242.

2 "All of the attributes by which we characterize ourselves, all the statements we make about ourselves, we refer to as the 'self-concept structure.'" Brookover, W., and Erickson, E., Society, Schools and Learning, op. cit., p. 100-101.
tion of the non-traditional independent variables. The work of Kinch seems particularly relevant in structuring this study. He has formalized a social-psychological theory of self-conceptualizations which is based on the writings of Mead, Cooley, and others. The general theory is stated as "The individual's conception of himself emerges from social interaction and, in turn, guides or influences the behavior of that individual." More specifically:

The actual responses of others to the individual will be important in determining how the individual will perceive himself; this perception will influence his self-conception which, in turn, will guide his behavior.

Kinch's model appears symbolically

\[ A \rightarrow P \rightarrow S \rightarrow B \]

where

- \( A \) = actual expectations, i.e., behavior of others,
- \( P \) = perceived expectations,
- \( S \) = self-conception,
- \( B \) = behavior

\( \rightarrow \) = "leads to"

While it will presently be shown that this model somewhat oversimplifies the symbolic interactionist approach to self-conceptualization, it serves as an excellent point of departure to gain insight into what variables we should investigate. The present study is concerned with the two factors depicted at the center of the above model, that is, the perceived expectations of others (P)

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1 Kinch, John, op. cit.
2 loc. cit., p. 481.
3 loc. cit., p. 482.
4 ibid.
and the self-conception (S). Aspiration, our dependent variable, has been defined as a type of self-conceptualization. Thus we intend to study the contributions to the prediction of aspirations made by the perceived expectations of others. The possible "others" whose expectations could be perceived by the individual, thus influencing his self-conception, are obviously numerous. The impact of peer group expectations have been noted by several researchers.\(^1\) The importance of teacher expectations have been the subject of prominent research.\(^2\) Parental expectations have been found to be of major importance, especially in relation to academic behavior.\(^3\)

This study, then, views the social milieu of the individual adolescent as being conceptually divisible into at least three regions: the peer group, the school, and the family. These divisions are not mutually exclusive, nor need they necessarily be in conflict. The relative and cumulative contribution of perceived expectations from these areas to the development of aspirations will be measured.

As noted above, an accurate interactionist approach to the concept of self-conceptualizations does not allow for the notion of a static, monolithic self-conception. Following directly from the

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writings of James and Mead, Brookover and his associates have
developed the idea of task-specific and role-specific self-conceptualizations around which people organize their behavior. It is
concerning this factor where Kinch's model presents an oversimplification, since the notion of a unitary self-conception disallows
the possibility of an interaction of several self-conceptions. It
is precisely this interaction which some theorists of the symbolic
interactionist school feel to be of major importance. Thus, as well
as the perceived expectations of others, this study takes into
account the subjects' self-conceptions of academic ability to assess
that variable's contribution to the educational aspirations of the
subjects.

Related Literature

As mentioned earlier, the literature concerning itself with
aspirations, educational or otherwise, reflects a lack of concep-
tual consistency which necessarily results in findings which are at
best inconsistent and at times simply not meaningfully comparable.
The following review is subdivided into segments; the age of the
research and the variables used by the researcher were the consider-
ations upon which these subdivisions were based.

1 James, William, *Psychology: Briefer Course*, New York: Henry
Holt, 1892, p. 179.

2 Mead, op. cit.

3 Brookover and Gottlieb, op. cit.; Brookover and Erickson, op.
cit. *Project #2831.*
Early studies

Early studies in this area grew out of the work of the psychological field theorists; Kurt Lewin¹ especially emphasized the concept of level of aspiration. Two of these early studies are to be dealt with here.

In studying college males, Child and Whiting² found that the following generalizations concerning levels of aspiration in general and previous achievement were supported:

- Success generally leads to a raising of the level of aspiration, and failure to a lowering.
- The stronger the success, the greater is the probability of a rise in level of aspiration; the stronger the failure, the greater is the probability of a lowering.
- Shifts in level of aspiration are in part a function of changes in the subject's confidence in his ability to attain goals.
- Effects of failure on level of aspiration are more varied than those of success.³

The research dealt with reported incidences of goal attainment and blockage, and the supposed effects of this on the level of aspiration toward similar goals in the future.


³loc. cit., p. 314.
Chapman and Volkman\textsuperscript{1} studied the effect of information about other's performance of a task (when no personal experience has occurred) and the level of aspiration, defined as "an estimate of one's future performance on a given task."\textsuperscript{2} When such knowledge was furnished before experience with the task occurred, the level of aspiration changed. When considerable experience occurred first, no change was noted in the level of aspiration.

**Social class variables**

More recent studies carried out by those other than field theorists have focused a great deal on the relationship between the level of aspiration and social class. In studying the relationship between socio-economic status and aspirations, Riessman\textsuperscript{3} finds a complex relationship. Past achievement (and thus higher socio-economic status) does not always yield a high aspiration level. Age is found to be an important factor in this association between past achievement and higher aspirations. The relation holds for older subjects, while it was not reflected in younger subjects. Reference groups, and orientations toward things other than success and mobility also lessen the association between social class and aspiration level.


\textsuperscript{2}loc. cit., p. 225.

\textsuperscript{3}Riessman, op. cit.
Sewell, et al., ¹ found that socio-economic status, measured by the prestige level of parental occupation, contributes to the prediction of educational aspiration independently from intelligence. This relationship maintains for both sexes. This study defined aspirations in the same manner that the present author defines plans.

Wilson ² maintains that because in urban areas school districting tends to segregate youths of differing socio-economic strata, school populations differ in their modal educational aspiration levels. Schools in this study were classified as upper white collar, lower white collar, or industrial. There is great divergence among the groups of schools in respect to the educational aspirations of the students. When controlling for the occupational level of the father, it was shown that the social class of the school is further associated with the educational aspirations of the students. The study seemed to be measuring aspirations in a manner similar to that used in the present research. In a closely related study, Herriett and St. John ³ found that school socio-economic status was related to the principal's expectation concerning their students' educational aspirations.

¹ Sewell, et. al., op. cit.
² Wilson, op. cit.
Haller and Sewell\textsuperscript{1} found that the educational aspirations of rural girls planning to enter the non-farm labor market was not significantly related to their residence. They also found that farm residence is associated with lower educational aspirations among boys entering the non-farm labor market, even when controlling for intelligence. Again, however, plans were being measured rather than aspirations or desires.

Boyle\textsuperscript{2} states that the effect of the social class level of the school varies according to the size of the city in which the school is located (either metropolitan areas or smaller communities). He suggests 1) that there might exist divergent educational standards in cities of different sizes, and thus different scholastic development; and 2) that in different sized cities different peer influences develop, thus bringing about differing educational motivation. He concludes from five different studies that the above considerations are quite reasonable, especially the notion of differing educational standards in dissimilarly populated cities.

Sewell and Armer\textsuperscript{3} created an academic argument when they reported their findings from a study in Milwaukee showing that the socio-

\begin{flushright}
\end{flushright}
economic status of the neighborhood does not add to the explanation of college plans above that already accounted for by sex, measured intelligence, and family socio-economic status. Turner challenges Sewell and Armer's assertions concerning the logical order of contextual and person variables in developing a conceptual model for educational aspirations. Several possible assumptions concerning the causal chain including socio-economic status, measured intelligence, and neighborhood context are discussed, with no real conclusion drawn as to the validity of any of these assumptions.

Turner could not dispute the statement that "Correlational analysis indicate that neighborhood context adds little to the explained variance in college plans beyond that accounted for by sex, family socio-economic status and intelligence." However, Turner feels that in light of the assumptions Sewell and Armer leave implied, their statement reflects a biased summary. Turner calls for longitudinal research to help clarify the situation.

In criticizing the Sewell and Armer study, Michael makes great import of the distinction between a predictive study such as Sewell and Armer's, and a causal analysis. He agrees that neighborhood


2 Sewell and Armer, op. cit., p. 159 (abstract).

context does not add to the prediction of college attendance, but insists that there remains causal relevance for this variable. "... (I)n individual characteristics cannot be assumed to have the same relevance for college (plans or aspirations) in all social settings." Boyle criticizes Sewell and Armer for treating their independent variables as if they were causally unrelated, an assumption not justified in light of the sociological literature. He maintains that the neighborhood affects aspirations through the normative climate.

In a rejoinder, Sewell and Armer hold to their previous stance, eschewing causal analysis on the basis of the nature of their's and other's data. They also refer to the phenomenon of great physical mobility in this country to assert that the neighborhood of the high school seniors who are so often studied need not be the developmentally important neighborhood for these individuals. Throughout this controversy and argument, the major dependent variable, aspirations, was not consistently defined and was used rather loosely in the texts of the various authors.

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1 loc. cit., p. 705.


Rodman and Voyanoff studied educational, occupational, and income aspirations in relation to social class. They assumed that people have a range of aspirations, rather than a static level of aspiration. Their hypothesis that within the lower class there is a wider range of aspirations than in the middle class was supported in all three areas of aspirations studied.

Religion as a variable

Religious affiliation has been studied in relation to aspirations. Mack, et. al. find that religious affiliation is not related to aspiration level. Their operational definition of aspirations probably includes both aspirations and plans, since questions concerning both goals and plans were asked. They suggest that the values associated with occupational roles might be more important than religious affiliation. Glenn and Hyland conclude that the effect of religious influence is not needed to explain the rise in socio-economic status characteristics of Catholics relative to Protestants during the period from the mid-1940's to the mid-

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1960's. Greeley\(^1\) reports that, in general, hypotheses stating that Catholics tended toward "antiscientism" and low economic rationality (low "Protestant ethic") were not supported by data from college graduates of 1961. He suggests that ethic, rather than religious, factors are important in this country. Thus the literature reflects the position that religious affiliation is not an essential variable to include in a study such as the present one, especially when considering the predictive nature of this work.

**Teacher influence as a variable**

In a study of teacher influence on students' aspirations, Rosenfeld and Zander\(^2\) postulate that considerations of social power, which they cite in earlier work, are important in their study of the classroom. Of five types of power delineated, four were found to influence students' aspirations, those being reward, legitimate, referent and expert power. Only indiscriminate coercive power exerted by the teacher was found to have no effect on student's aspirations. They also concluded that "The separate bases of power are effective in determining aspirations to the degree that the students are ego involved in the performances on which they are setting aspirations."\(^3\) They define aspiration as "that level of achievement, indicated by a


\(^2\)Rosenfeld and Zander, op. cit.

\(^3\)loc. cit., pp. 10-11.
grade, which a pupil realistically expects to attain in a given course.\(^1\) This is closer to a definition of plans than to aspirations as the present study defines them, Rosenfeld and Zander asked the students, via a questionnaire, "What final grade do you think you should get in math this year?"\(^2\) This question might be measuring something other than either aspirations or plans.

**Peer influence as a variable**

Several studies have dealt with the influence of student's peers on held aspirations. When controlling for parental education, Alexander and Campbell\(^3\) found a relationship between best friend's plans for college and 1) expectations to attend college, 2) desire to go to college when expecting to go, 3) desire to go to college when not expecting to go, and 4) actual college attendance after expecting to attend. These relationships were all stronger when the best friend choice was reciprocated, as measured socio-metrically.

Riesman's\(^4\) famous ideas concerning the emergence of the other-directed social character type in the mid-twentieth century United States implies that aspirations as well as other values and attitudes would be in large part determined by the expectations and values of

\(^1\) loc. cit., p. 1.  
\(^2\) loc. cit., p. 4.  
\(^3\) Alexander and Campbell, op. cit.  
the peer group. In an empirical work, Riley, et. al. conclude that

. . . the other-directed tendency to stress peer approval
to the detriment of crucial internalized goals appears in
our data primarily in the adolescent's stereotype of peer
group values, and in the aspirations of some—but not all
adolescents themselves. Yet, even these adolescents do
not project this stereotype to the larger, adult world. ²

Haller and Butterworth ³ studied the relationship between peer
influence, operationally defined in terms of best friends, and edu-
cational and occupational aspirations. The unit of analysis was the
peer pair, with pairs being matched according to each member's score
on each control variable. The control variables were measured
intelligence, socio-economic status, and parental desire for high
achievement. The hypothesis that peer influence effects educational
aspirations was not strongly supported. The authors call for more
research in the area, including longitudinal studies.

Using path analysis, Duncan, et. al. ⁴ reinterpreted Haller
Butterworth's data. They hoped to estimate the magnitude of peer
influences (as opposed to parental or social structural influences),
rather than merely assess the statistical significance of the effect

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¹Riley, M.W., Riley, J.W., and Moore, M.E., "Adolescent Values
and the Riesman Typology: An Empirical Analysis," in Lipset, S.M.,
and Lowenthal, L. (eds.), Culture and Social Character, New York:

²loc. cit., p. 385.

³Haller, Archie O., and Butterworth, C.E., "Peer Influence on
Levels of Occupational and Educational Aspiration," Social Forces

⁴Duncan, et. al., op. cit.
of peers. They develop a model positing the underlying factor of "ambition" which helps to explain educational aspirations. This concept refers to some "general level of aspiration, as the latter was conceptualized in the classic literature on the subject."¹ Aspirations as measured, then, are indicators of the construct "ambition." While the work of Duncan, et. al. is to be emulated in its methodological and statistical techniques, its value is lessened through the vagueness of the concept of ambition. Furthermore, they equate aspirations with plans which, as has been noted several times, does not aid the clarity of the research.

Parental influence as a variable

Several studies have appeared concerning the influence of parents on the educational aspirations of their children. Bordua, ² though not distinguishing between aspirations and plans, found sex, socio-economic status, and religious affiliation to be independently related to educational aspirations. When controlling for parental stress upon their children's future education, the general sex relationship, i.e., college plans being associated with males, but not with females, was reversed. When controlling for parental stress, the effect of religious affiliation was reduced somewhat, and that of socio-economic status was greatly reduced. He suggests that other

¹loc. cit., p. 130.
social, non-parental factors also be studied, such as previous school experience.

Krauss operationally defined aspirations as plans for future education. He examined five factors: 1) discrepant situations in the family of orientation; 2) the experience of family members and friends; 3) the status of the working class family; 4) the influence of peers and participation in the school culture; and 5) the working class students; attitudes and middle class values. Focusing on working class youths whose aspirations were found to be significantly lower than middle class youth, the study examined these five factors for differences between middle and working class youth. The study revealed two major sources of educational aspirations. Most important were these family conditions: 1) status discrepancies, e.g., the mother having a college education, or a family history of downward mobility; 2) family members or friends who have gone to college; 3) the father's occupational status, especially when the father had graduated from high school. The second important related factors were peer associations and extra-curricular activities. College oriented working class students tended to associate with others having college aspirations, tended to be very active in extra-curricular activities, and the school they attended was likely to be one characterized as middle class.

After having found measured intelligence and socio-economic status measured by the father's occupation to be nearly equal as

\[ \text{Krauss, op. cit.} \]
predictors of educational aspiration, Kahl\textsuperscript{1} pursued an interview study focusing on lower middle class boys whose environment provided a wide choice of post-high school possibilities. He found that within this narrow social class range, familial social influence accounted for variation in aspirations which measured intelligence and socio-economic status did not. However, plans were measured rather than aspirations as the present study defines them, thus the contribution to desires made by socio-economic status, intelligence, or family influence was not actually ascertained in this study.

Sewell and Shah\textsuperscript{2} report of a seven year study of more than 9,000 Wisconsin subjects focusing on the effects of parental education on the educational aspirations and achievement of their children. While the educational level of both parents is significantly related to perceived parental encouragement, college plans, college attendance, and college graduation, the father's education has a slightly stronger association for males. Father's and mother's level of education are equally related to all four dependent variables for females. These relationships hold when controlling for the child's measured intelligence. When there is a discrepancy between parents' levels of education, the intelligence and sex of the child are important influences on educational aspirations and

\textsuperscript{1}Kahl, cp. cit.

achievement. In general,

\[\text{\ldots consistency in the educational achievements of parents who are moderately educated seems to provide a more advantageous social-psychological environment than does extreme discrepancy in parents' educational achievements.}\]

Once again, aspirations are operationally equated with plans.

While defining aspirations synonymously with plans, Kandel and Lesser\(^2\) studied triads of students matched with their mother and best-school-friend. They find that students' educational plans are in closer accord with their mother than with best-school-friend, while considerable agreement with both exists. They warn of overgeneralizing the notion of parental versus peer influences. They suggest that "The particular content area under discussion must be specified; for certain values or areas, peers may be more influential than parents; for other issues, the reverse may be true."\(^3\) They conclude that in areas of adolescent's life goals, parental influence is stronger than that of peers.

In conducting their research in this area, Bennett and Gist\(^4\) distinguished between aspirations and plans. Their data revealed that both plans and aspirations varied little across social classes. Parental influence was found to vary significantly with aspirations,

\[^1\text{loc. cit., p. 209.}\]

\[^2\text{Kandel, Denise B. and Lesser, Gerald S.,'Parental and Peer Influences on Educational Plans of Adolescents,' }\text{American Sociological Review} \text{34:2 (April 1969)}, \text{pp. 213-223.}\]

\[^3\text{loc. cit., p. 222.}\]

\[^4\text{Bennett and Gist, op. cit.}\]
with maternal influence appearing to be a phenomenon of the lower class levels, regardless of the race of the subject.

Studies distinguishing between aspirations and plans

The distinction which Bennett and Gist make between aspirations as desires and plans as a more realistic type of expectation is a factor which sets apart several studies reported in the literature. Stephenson\(^1\) distinguished between occupational plans and occupational aspirations as factors to be examined when studying mobility orientations. He suggests that the ninth-graders who were his subjects held a relatively common aspiration level, while it was their expectations for future occupations which varied with social class background.

In making the distinction between aspirations and plans, Morland\(^2\) found that occupational aspirations did not vary significantly by class, but that educational aspirations did. His study researched only middle and lower class children. He concludes that the social milieu of the lower class children mitigates against the expectations of fulfilling the American dream. He speculates that the lower class child might not realize the relationship between educational achievement and occupational advancement.

Weiner and Murray\(^3\) contend that high levels of aspiration are

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\(^2\) Morland, op. cit.

\(^3\) Weiner and Murray, op. cit.
held across both lower and middle socio-economic strata. They find that goals held by members of the lower class are more idealized, while goals held by the middle class incumbents are more realistic. They posit a class "difference in the willingness to preserve goals while encountering obstacles."¹ In a similar work, Caro and Pihlblad² refer to the distinction under discussion as one between aspirations (desires) and the perception of the accessibility of the situation toward which one aspires. They find it is these expectations which vary with social class, rather than desires per se.

While not focusing on aspirations as the dependent variable, Bryan³ analyzed the same data used in the present study by treating the behavior of remaining in or dropping out of high school as the dependent variable. He used both educational plans and educational aspirations as independent variables predicting dropout behavior, while controlling for the self-concept of academic ability, socio-economic status, and measured intelligence. Educational aspirations were 55% successful in predicting dropout, educational plans were 66% successful, and additively the two variables accounted for 77% of the dropouts. Bryan concludes that "the concepts of Educational Plans and Educational Aspirations are mutually exclusive and that each concept may make a contribution to the prediction of high

1 loc. cit., p. 320.
2 Caro and Pihlblad, op. cit.
school dropout behavior.¹ This constitutes additional empirical support for the theoretical distinction between aspirations and more concrete plans for the future.

A closely related study

In a study very similar to the present research, Herriott² approached the intervening variables affecting educational aspirations from a role theory perspective based on the writings of Hyman, Merton, Gross and others. In that study, Herriott delineates a self-assessment factor and an expectation factor. More specifically, these are "self-assessment relative to others," and expectations perceived to be held by "significant incumbents of relevant counter positions."³ He develops seven derived variables dealing with the bases for self assessment and eleven "loci of expectations." Of the seven bases for self-assessment, three are of an intellectual nature (motivation, ability, performance), two are economic in nature (motivation, performance), and two deal with activities (school, non-school). The eleven loci of expectations attempt to encompass the possible reference individuals (both comparative and normative) which the individual might take into account in his own behavior. Thus Herriott develops eighteen independent variables which he measured in relation to the dependent variable of educational aspira-

¹Loc. cit., p. 96.
²Herriott, op. cit.
³Herriott, op. cit. p. 162.
tions. His research closely resembles the present study, with variables developed from a somewhat different theoretical perspective yet operationally very similar. The eighteenth-order multiple correlation between his independent and dependent variables is .901, i.e., he accounts for over 81% of the statements of educational aspiration with knowledge of his independent variables.

However, several considerations must be made concerning this research. First, the important distinction between aspirations and plans was not made. The study explicitly measures plans and labels them as aspirations. Secondly, from his data Herriott did not ascertain to what degree the more traditional measures of socio-economic status characteristics, school achievement, and measured intelligence could account for educational aspirations. For reasons of parsimony, Herriott should have assessed his independent variables in such a manner to allow him to compare their predictive powers with a set of more traditional predictors of aspirations. Finally, the purely cross-sectional study limits to a degree the validity of his predictive statements.

The Purposes of This Research

With the aim of adding to the existing knowledge about the desires of young people already extant in the fields of sociology, psychology, social psychology, and education, this study will test some theoretical derivatives of the symbolic interactionist school of thought. Major theoretical propositions utilized in this study are:
1) Desires are a category of task-specific or role-specific self-conceptualizations and thus are a function of the perceived expectations of others in the social milieu.

2) As a category of self-conceptualization, desires, or aspirations function in interaction with other self-conceptualizations in a process resulting theoretically in non-random behavior. Thus, aspiration type self-concept behaviors are affected by other categories of self-conceptualizations, e.g., the self-concept of academic ability.

In light of the previous findings in this area, the procedure adopted in this study will be to accept socio-economic status, past achievement, and measured intelligence as traditional predictors of educational aspiration. Social psychological variables, i.e., the self-concept of academic ability and the perceived expectations of parents, friends, and teachers will be assessed in terms of their predictive utility both against and with the criterion established by the traditional variables. Questions with which this research is concerned, then, are:

1) With what accuracy can one predict educational aspirations from knowledge of socio-economic status, past educational achievement, and measured intelligence?

2) With what accuracy can one predict educational aspirations from knowledge of the self-concept of academic ability, and the perceived expectations of parents, friends, and teachers?

3) How much, if any, is the error in prediction of educational
aspirations reduced by also taking into account, both separately and conjointly, the self-concept of academic ability, the perceived expectations of parents, the perceived expectations of friends, and the perceived expectations of teachers, respectively?

Summary

The development of educational aspirations in the young has been discussed in terms of theoretical considerations and empirical findings. In light of the research already done in this area, and the educational and social psychological thought of Mead, Kinch, Brookover, Lavin and others, this study will attempt to predict statements of educational aspiration through the use, both separately and conjointly, of a set of traditional variables (socio-economic status, past achievement, and measured intelligence) and a set of social psychological variables (self-concept of academic ability, and perceptions of the expectations of parents, friends and teachers).
CHAPTER II

THE RESEARCH METHODOLOGY

This chapter deals with the sites of the research and the population studied, the operational definitions of the variables and the instrumentation of the study, the characteristics of the sample in terms of the independent variables, and the analytic procedures used in this study.

The Population, Sample, and the Sites of the Research

In the 1960-1961 academic year, Brookover et. al., started the longitudinal study from which the data for the present study have been extracted. Approximately 2,000 students from the seventh-grade class in the four junior-high schools in a mid-western city with a population of about 110,000 constituted the initial population. These students were studied throughout their junior-high and high school careers.

Since measured intelligence is treated in this study as a predictor variable, and IQ tests were administered only in the ninth-grade, it was decided that the present study would attempt to predict the statements of educational aspiration made by students in the tenth-grade from the independent variables measured when these students were in the ninth grade. Thus the size of the sample was determined by the number of tenth-graders from whom were obtained
statements of desired educational attainment levels and for whom there were complete data with respect to all seven independent variables. Data from black students were not included because it is not the intention of this study to show the effect of race on aspirations. Previous research in this area does show some racial differences in self-concept and related variables from the school arena.¹

Thus from the total population from which Brookover and associates gathered data, the students meeting the following criteria were included.

1. Data for dependent variable during the tenth grade is available.

2. Complete data for all independent variables during ninth grade is available.

3. Students were pursuing the regular course of study in the school program. Special education program students were excluded.


Operational Definitions and Instrumentation

Socio-economic status (SES)

Socio-economic status was operationally defined in terms of the occupation of the subjects' father or head of family. Occupations were assigned socio-economic rating according to the Duncan Socio-

Economic Index for All Occupations. The use of the Duncan Scale allows the researcher to place occupations on a scale from 1 to 100, a scale based on the education, income, and prestige levels associated with the occupation.

Past School Achievement (GPA)

Academic achievement was defined as the grade point average of the students. English, mathematics, social studies, and science were the only subjects included in the grade point average. Letter grades were converted to numerical values by setting A = 4, B = 3, C = 2, D = 1, and E = 0. The grades were obtained from the student records in January, 1963, while the questionnaire data was obtained during the fall of 1962 for all other independent variables.

Intelligence (IQ)

Group intelligence test scores were obtained through the administration of the California Test of Mental Maturity.

Perceived Parental Expectations (PPEx)

Perceptions of the expectations for educational attainment held by parents (see Appendix A) were ascertained by the question, "How far do your parents expect you to go in school?" Seven alternatives

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were given the subjects in answering this question. These alternatives were:

1. They expect me to quit as soon as I can.
2. They expect me to go to high school for a while.
3. They expect me to graduate from high school.
4. They expect me to go to business or technical school.
5. They expect me to go to college for a while.
6. They expect me to graduate from college.
7. They expect me to do graduate work beyond college.

**Perceived expectations of friends (PFEx)**

The perceptions held by students of their friends' expectations (see Appendix B) was operationalized by asking the students, "How far do your friends expect you to go in school?" The same range of alternative answers were offered as to the question concerning parental expectations.

**Perceived expectations of teachers (PTEx)**

Similarly, students were asked, "How far do your teachers expect you to go in school?" Again, the same seven alternative responses were listed (see Appendix C).

**Self-concept of academic ability (SCA)**

The self-concept of academic ability, conceptually a derivative of the interactionist school of Mead, is measured through the use of the Michigan State Self-Concept of Ability Scale (see Appendix D). Developed by Brookover, et. al. under the auspices of the U. S. O. E. Cooperative Research Project # 845, this scale consists of eight multiple choice items which ask the respondent to compare himself with others from his social milieu. The reliability of this group
research tool has been determined in the previous work of the researchers who developed the scale.¹

**Educational Aspiration (EdAsp)**

The dependent variable, educational aspiration, was determined by asking the question, "If you were free to go as far as you wanted in school, how far would you like to go?" The same list of seven alternatives that were used with the questions concerning the expectations of others, ranging from quitting immediately to doing work in graduate school, were also used with this question (see Appendix E).

**Characteristics of the Sample**

In this section the sample will be described in terms of all seven independent variables. This is done in order to ascertain the relevant characteristics of the sample in light of which the subsequent findings will be viewed.

**SES**

The frequency distribution of the sample as ranked on the Duncan Scale is given in Table 3.1. Also included in this table are the percentage distributions of the sample and the civilian male labor force of 1950.²


²Duncan, op. cit., p. 147.
### TABLE 3.1

**COMPARISON OF THE PRESENT SAMPLE AND THE CIVILIAN LABOR FORCE OF 1950 ON THE DUNCAN SCALE OF SOCIO-ECONOMIC STATUS**

<table>
<thead>
<tr>
<th>SES Index</th>
<th>Frequency</th>
<th>Per Cent of Sample</th>
<th>Per Cent of 1950</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9</td>
<td>33</td>
<td>3.0</td>
<td>15.0</td>
</tr>
<tr>
<td>10-19</td>
<td>262</td>
<td>23.5</td>
<td>33.9</td>
</tr>
<tr>
<td>20-29</td>
<td>135</td>
<td>12.1</td>
<td>10.8</td>
</tr>
<tr>
<td>30-39</td>
<td>124</td>
<td>11.1</td>
<td>11.4</td>
</tr>
<tr>
<td>40-49</td>
<td>162</td>
<td>14.5</td>
<td>9.3</td>
</tr>
<tr>
<td>50-59</td>
<td>135</td>
<td>12.1</td>
<td>5.6</td>
</tr>
<tr>
<td>60-69</td>
<td>143</td>
<td>12.8</td>
<td>6.7</td>
</tr>
<tr>
<td>70-79</td>
<td>58</td>
<td>5.2</td>
<td>3.8</td>
</tr>
<tr>
<td>80-89</td>
<td>49</td>
<td>4.4</td>
<td>2.5</td>
</tr>
<tr>
<td>90-99</td>
<td>15</td>
<td>1.3</td>
<td>1.0</td>
</tr>
<tr>
<td>Total</td>
<td>1116</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

By comparing the columns representing the percentages of the sample and the 1950 population, respectively, in terms of ten point intervals on the Duncan Scale, it can be seen that the 0-9 category is under-represented in the sample, the 10-19, 50-59, and 60-69 intervals are somewhat over-represented, and that the other six categories are quite accurately reflected in the sample.

**GPA**

The distribution of grade-point-averages, shown in Table 3.2, is a normal one, with the mean falling at 2.34 (A = 4, B = 3, etc.), and a standard deviation of .81. Thus the mean grade-point-average is slightly above a "C" average, which by the very structure of the grading system is typical.
TABLE 3.2
FREQUENCY DISTRIBUTION OF GRADE-POINT-AVERAGES

<table>
<thead>
<tr>
<th>GPA</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0-.4</td>
<td>3</td>
</tr>
<tr>
<td>.5-.9</td>
<td>15</td>
</tr>
<tr>
<td>1.0-1.4</td>
<td>149</td>
</tr>
<tr>
<td>1.5-1.9</td>
<td>159</td>
</tr>
<tr>
<td>2.0-2.4</td>
<td>305</td>
</tr>
<tr>
<td>2.5-2.9</td>
<td>188</td>
</tr>
<tr>
<td>3.0-3.4</td>
<td>176</td>
</tr>
<tr>
<td>3.5-3.9</td>
<td>76</td>
</tr>
<tr>
<td>4.0</td>
<td>45</td>
</tr>
</tbody>
</table>

Mean = 2.341
Standard deviation = .8093

IQ

As shown in Table 3.3, a distribution approximating the normal distribution was obtained on the variable of measured intelligence.

TABLE 3.3
FREQUENCY DISTRIBUTION OF MEASURED INTELLIGENCE SCORES

<table>
<thead>
<tr>
<th>IQ</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>60-69</td>
<td>2</td>
</tr>
<tr>
<td>70-79</td>
<td>20</td>
</tr>
<tr>
<td>80-89</td>
<td>74</td>
</tr>
<tr>
<td>90-99</td>
<td>197</td>
</tr>
<tr>
<td>100-109</td>
<td>299</td>
</tr>
<tr>
<td>110-119</td>
<td>296</td>
</tr>
<tr>
<td>120-129</td>
<td>164</td>
</tr>
<tr>
<td>130-139</td>
<td>59</td>
</tr>
<tr>
<td>140-149</td>
<td>8</td>
</tr>
<tr>
<td>150-159</td>
<td>2</td>
</tr>
<tr>
<td>160-169</td>
<td>1</td>
</tr>
</tbody>
</table>

Mean = 108.290
Standard deviation = 13.8859

A rather large range of IQ scores were found in the sample; however,
standard deviation of 13.8 is typical of the California Test of Mental Maturity. The mean score of 108 indicates a sample of somewhat higher general measured intelligence than the initial norms established for the test.

SCA

The frequency distribution obtained after administration of the Michigan State Self-Concept of Ability Scale is shown in Table 3.4. The scale ranges from a possible 8 to 40; the mean of 28 and the slightly skewed distribution indicate that a moderately large segment of the sample holds fairly high self-conceptions of academic ability.

<table>
<thead>
<tr>
<th>SCA Scale Score</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-9</td>
<td>0</td>
</tr>
<tr>
<td>10-14</td>
<td>3</td>
</tr>
<tr>
<td>15-19</td>
<td>39</td>
</tr>
<tr>
<td>20-24</td>
<td>164</td>
</tr>
<tr>
<td>25-29</td>
<td>467</td>
</tr>
<tr>
<td>30-34</td>
<td>350</td>
</tr>
<tr>
<td>35-39</td>
<td>100</td>
</tr>
</tbody>
</table>

mean = 28.312
standard deviation = 4.513

PPEx, PFEx, PTEx

Perceptions of expectations held by parents, friends, and teachers can be seen in Table 3.5 to vary similarly. The means of
these three distributions are very similar and their standard
deviations are almost identical. These bimodal distributions show
that the most commonly expected educational attainment levels are
graduation from high school and graduation from college.

TABLE 3.5
FREQUENCY DISTRIBUTIONS OF PERCEIVED EXPECTATIONS ITEMS

<table>
<thead>
<tr>
<th>Response to Expectation Item</th>
<th>PPEx Freq.</th>
<th>PFEx Freq.</th>
<th>PTEx Freq.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1 = quit now . . . 7 = go to graduate school)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>280</td>
<td>317</td>
<td>259</td>
</tr>
<tr>
<td>4</td>
<td>109</td>
<td>110</td>
<td>91</td>
</tr>
<tr>
<td>5</td>
<td>95</td>
<td>136</td>
<td>104</td>
</tr>
<tr>
<td>6</td>
<td>510</td>
<td>470</td>
<td>547</td>
</tr>
<tr>
<td>7</td>
<td>117</td>
<td>71</td>
<td>103</td>
</tr>
</tbody>
</table>

mean 5.049 4.838 5.083
standard deviation 1.424 1.418 1.412

Analytic Procedures

The Center for Sociological Research at Western Michigan Univer-
sity provided the use of an IBM 082 Counter Sorter and manual cal-
culators which were used in determining frequency distribution and
in some of the calculations incorporated into this study. An IBM
1620 Computer and computer operator assistance was provided by
the Western Michigan University Computer Center. This aided in
statistical computation and the matching of ninth and tenth grade
data.

In Chapter I, the following general statements were made:
1) Socio-economic status characteristics, past academic achievement, and measured intelligence have been found empirically to be predictive of educational aspirations.

2) A proposition derived from symbolic interactionist theory states that the perceived expectations of parents, friends, and teachers, and the self-concept of academic ability are important variables when attempting to account for aspirations. Findings as reported in the literature have to a degree supported hypotheses dealing with these variables.

The aim of this study, as noted before, is to assess the relative contributions which these two sets of variables make to the prediction of educational aspirations. The similarities in the measurement of the three categories of expectations, i.e., expectations held by parents, friends, and teachers, present methodological problems. The questionnaire used to gather the data was structured such that the three items measuring expectations from these three regions of the social milieu directly followed one another. Thus the associations between these three measures, shown vividly in the correlation matrix presented in Table 3.6, might be due to response set on the part of the student subjects, or might reflect the actual simultaneous occurrences of these similarities in the students' perceptions of the expectations held by parents, peers and teachers.

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TABLE 3.6

CORRELATION MATRIX OF INDEPENDENT VARIABLES

<table>
<thead>
<tr>
<th></th>
<th>SeS</th>
<th>IQ</th>
<th>GPA</th>
<th>PPEx</th>
<th>PTEX</th>
<th>SCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socio-economic Status</td>
<td>---</td>
<td>.248</td>
<td>.290</td>
<td>.340</td>
<td>.308</td>
<td>.278</td>
</tr>
<tr>
<td>Measured Intelligence</td>
<td>---</td>
<td>.542</td>
<td>.393</td>
<td>.381</td>
<td>.410</td>
<td>.506</td>
</tr>
<tr>
<td>Past School Achieve-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ment (GPA)</td>
<td>---</td>
<td>.449</td>
<td>.474</td>
<td>.463</td>
<td>.599</td>
<td></td>
</tr>
<tr>
<td>Perceived Expectations</td>
<td>---</td>
<td>.736</td>
<td>.752</td>
<td>.589</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of Parents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Expectations</td>
<td>---</td>
<td>.741</td>
<td>.614</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of Friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Expectations</td>
<td>---</td>
<td>.602</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of Teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Concept of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Ability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In order to circumvent the possible lack of content validity which may be inherent in these measures, the three responses were summated and termed the "perceived expectations of others" for use in extracting findings from the data. While this is theoretically less desirable than had independent measures of the three categories of perceived expectations been made, no insurmountable methodological problems result from this procedure. The deleterious effects of this procedure lie in the fact that the knowledge of precisely which of the perceived expectations is most highly predictive of aspirations, and which is perhaps irrelevant, cannot now be determined in this study.
The relative amounts of explained variance in statements of educational aspirations is determined through the use of multiple linear regression analysis.\textsuperscript{1} The F test is used to determine the significance of the findings; the .05 level will be adopted as the criterion for statistical significance.

The following variables and configurations of variables will be analyzed as predictors of educational aspirations:

1. SES + IQ + GPA
2. SCA
3. POEx
4. SCA + POEx
5. [SES + IQ + GPA] + SCA
6. [SES + IQ + GPA] + POEx
7. [SES + IQ + GPA] + POEx + SCA

Once the explained variances ($r^2$) are calculated, the major objective of this study can be carried out; that is, to ascertain how much, if any, significant increase in the explained variance in statements of educational aspirations made by tenth-grade students results from taking into account certain theoretically derived social psychological variables in addition to other variables traditionally used in studying aspirations, over that explained by the use of the traditional variables only.

CHAPTER III

FINDINGS

This study intended to determine the increment, if any, in the ability to predict educational aspirations when using selected social psychological variables both separately and in conjunction with traditional variables; it is this set of traditional predictors which make up the criterion of predictive efficiency upon which judgments concerning the worth of the use of the social psychological variables will be made.

The first section of this chapter includes findings relevant to the individual and combined predictive efficiencies of traditional and social psychological predictors. The second section reports findings concerning comparisons of various sets of predictors in terms of differences in explained variances. These comparisons provide the basis for evaluating the worth of the various predictors of educational aspirations.

The Traditional Predictors

The first objective was to determine the predictive efficiency of what have been termed in this study the traditional predictors of educational aspiration. Underlying much of the previous research studying educational aspirations is the notion that socio-economic status level (SES), measured intelligence (IQ), and past school achievement (GPA) contribute to the development of educational
aspiration. This relationship appears symbolically as:

\[ \text{SES} + \text{IQ} + \text{GPA} \rightarrow \text{EdAsp} \]

In terms of the regression equation, this appears as:

\[ Y' = a + b_1X_1 + b_2X_2 + b_3X_3 + e \]

where \( a \) = regression constant

\[ X_1 = \text{SES} \]
\[ X_2 = \text{IQ} \]
\[ X_3 = \text{GPA} \]

\( b_1, b_2, b_3 \) = beta coefficients associated with respective variables

\( e \) = error in prediction

\( Y' \) = predicted educational aspirations

The results of all multiple regression analyses are shown in Appendix F. Of the variance in statements of educational aspirations made by tenth-grade students, 19.5% can be accounted for by knowledge of the students' socio-economic status level, their measured intelligence, and their grade-point-average, all of the latter being measured when the students were in the ninth-grade. This figure constitutes the criterion by which the social psychological variables will be evaluated.

The Social Psychological Variables

As developed in earlier chapters, certain social psychological variables derived from symbolic interactionist theory can be expected to enhance the predictive power of the set of traditional variables made up of SES, IQ, and GPA. Earlier one purpose of this study
was stated to be the assessment of the ability of these variables
to predict educational aspirations, both separately and conjointly.
The social psychological variables which are theoretically expected
to predict educational aspirations are the self-concept of academic
ability (SCA), and the perceived expectations of others (POEx), e.g.,
parents, friends, and teachers. As discussed in Chapter II, it is
appropriate that the more general variable, "the perceived expecta­
tions of others," which includes parents, friends, and teachers,
be used in lieu of the more specific variables.

**The self-concept of academic ability**

The relationship between the self-concept of academic ability
and educational aspirations is written symbolically as:

\[ Y_2' = a + bX_4 + e \]

where

- \( a \) = regression constant (y-intercept)
- \( b \) = the Pearson product-moment correlation
  coefficient representing the relationship
  between \( Y \) and \( X_4 \)
- \( X_4 = SCA \)
- \( e \) = error in prediction
- \( Y_2' = predicted \ educational \ aspirations \)

The Pearson product-moment correlation coefficient showing the
strength of the relationship between the self-concept of academic
ability and educational aspirations is .4942. This represents an
explained variance of 24.4%. This shows that the self-concept of
academic ability when used alone, is a better predictor of edu­
cational aspirations than the entire set of traditional variables
made up of SES, IQ, and GPA. The increase in the explained variance is from 19.5% using the set of traditional variables to 24.4% using SCA, an increase of slightly more than 25%.

Perceived expectations of others

The notion that perceptions of expectations held by others are related to educational aspirations is shown by:

\[ Y' = a + bX_5 + e \]

where

- \( a \) = regression constant (y-intercept)
- \( b \) = Pearson product-moment correlation coefficient representing the relationship between \( Y \) and \( X_5 \)
- \( X_5 = POEx \)
- \( e \) = error in prediction
- \( Y' \) = predicted educational aspirations

The Pearson product-moment correlation coefficient representing the relationship between the perceived expectations of others and educational aspirations is .5545. Thus the explained variance is 30.8%, which is an increase of almost 58% over the explained variance found through the use of the set made up of SES, IQ, and GPA. Also, the perceived expectations of others is over 26% more accurate as a predictor of educational aspirations than is the self-concept of academic ability.

Self-concept of academic ability in conjunction with the perceived expectations of others

When assessed together, the relationship between the social psychological variables and educational aspirations would appear as:
Shown in the form of the regression equation, this becomes

\[ Y' = a + b_4 X_4 + b_5 X_5 + e \]

where \( a \) = regression constant

\( X_4 = \text{SCA} \)

\( X_5 = \text{POEx} \)

\( b_4, b_5 = \text{beta coefficients associated with respective variables} \)

\( e = \text{error in prediction} \)

\( Y' = \text{predicted educational aspirations} \)

As shown in Appendix F, when assessing the psychological variables as a set separately from the set of traditional variables, the explained variance is substantially higher (33.6%) than that found when using the set of traditional variables alone (19.5%). This is an increase in the accuracy of prediction of slightly more than 72%. Treating the social psychological variables in this manner also results in less error in prediction than when using SCA alone, or POEx alone. The social psychological predictors as a set are almost 38% more accurate in the prediction of educational aspirations than is SCA alone, and about 9% more accurate than POEx alone. The statistical significance of these differences in obtained explained variances will be treated later in this chapter.

The Traditional Variables and The Social Psychological Variables

Another question with which this research is concerned is the degree to which the predictive efficiency is enhanced by adding the
social psychological variables, singly and as a set, to the set of traditional variables.

The self-concept of academic ability in conjunction with the traditional variables

When the self-concept of academic ability is taken into consideration, the relationship may be shown as:

\[
[\text{SES} + \text{IQ} + \text{GPA}] + \text{SCA} \rightarrow \text{EdAsp}
\]

In terms of the regression equation, the above appears as follows:

\[
Y'_5 = a + \left[ b_1 X_1 + b_2 X_2 + b_3 X_3 \right] + b_4 X_4 + e
\]

where 

- \( a \) = regression constant
- \( X_1 = \text{SES} \)
- \( X_2 = \text{IQ} \)
- \( X_3 = \text{GPA} \)
- \( X_4 = \text{SCA} \)
- \( b_1, b_2, b_3, b_4 = \) beta coefficients associated with respective variables \\
- \( e = \) error in prediction
- \( Y'_5 = \) predicted educational aspirations

The results of this regression analysis appear in Appendix F and show that explained variance in educational aspirations has increased from 19.5%, to 27.1%, and increase of almost 39%, by taking into account the self-concept of academic ability as well as SES, IQ, and GPA.

Perceived expectations of others in conjunction with the traditional variables

When the perceived expectations of others are assessed in
conjunction with the set of traditional variables, the relationship appears as:

\[ (\text{SES} + \text{IQ} + \text{GPA}) + \text{POEx} \rightarrow \text{EdAsp} \]

In regression equation form:

\[
y' = a + \left[ b_1 X_1 + b_2 X_2 + b_3 X_3 \right] + b_5 X_5 + e
\]

where \( a \) = regression constant

\( X_1 = \text{SES} \)
\( X_2 = \text{IQ} \)
\( X_3 = \text{GPA} \)
\( X_5 = \text{POEx} \)

\( b_1, b_2, b_3, b_5, \) = beta coefficients associated with respective variables

\( e \) = error in prediction

\( y'_6 \) = predicted educational aspirations

This regression analysis (see Appendix F) shows that the explained variance increases to 33.6% when perceptions of the expectations held by others are taken into account with the set of traditional variables, from 19.5% explained variance found when using only the set of traditional variables.

Self-concept of academic ability and perceived expectations of others in conjunction with the traditional variables

When both the self-concept of academic ability and perceived expectations of others are assessed conjointly with the set of traditional variables, the relationship appears symbolically as:

\[ (\text{SES} + \text{IQ} + \text{GPA}) + (\text{SCA} + \text{POEx}) \rightarrow \text{EdAsp} \]
The regression equation now is shown by:

\[ Y' = a + \left[ b_1 X_1 + b_2 X_2 + b_3 X_3 \right] + \left[ b_4 X_4 + b_5 X_5 \right] + e \]

where 

- \( a \) = regression constant
- \( X_1 \) = SES
- \( X_2 \) = IQ
- \( X_3 \) = GPA
- \( X_4 \) = SCA
- \( X_5 \) = POEx

- \( b_1, b_2, b_3, b_4, b_5 \) = beta coefficients associated with respective variables
- \( e \) = error in prediction
- \( Y' \) = predicted educational aspirations

The results of this regression analysis are again shown in Appendix F. By adding the social psychological variables to the traditional variables, the explained variance increases from 19.5% to 34.75%, an increase in the accuracy of prediction of slightly more than 78%.

The Research Hypotheses

The explained variances obtained through the use of the various configurations of variables are summarized in Table 4.1. It can be seen that the obtained increase in explained variances are in general consistent with the theoretical notions expressed earlier. However, the systematic criteria of significance should be used before drawing conclusions.
TABLE 4.1

SUMMARY OF CONFIGURATIONS OF VARIABLES WITH THE OBTAINED MULTIPLE CORRELATIONS AND EXPLAINED VARIANCES

<table>
<thead>
<tr>
<th>Variances</th>
<th>Multiple r</th>
<th>Explained Variance (r²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES + IQ + GPA → EdAsp</td>
<td>.4422</td>
<td>²Y₁ = 19.54%</td>
</tr>
<tr>
<td>SCA → EdAsp</td>
<td>.4942</td>
<td>²Y₂ = 24.42%</td>
</tr>
<tr>
<td>POEx → EdAsp</td>
<td>.5545</td>
<td>²Y₃ = 30.75%</td>
</tr>
<tr>
<td>SCA + POEx → EdAsp</td>
<td>.57999</td>
<td>²Y₄ = 33.63%</td>
</tr>
<tr>
<td>[SES + IQ + GPA] + SCA → EdAsp</td>
<td>.5242</td>
<td>²Y₅ = 27.14%</td>
</tr>
<tr>
<td>[SES + IQ + GPA] + POEx → EdAsp</td>
<td>.58004</td>
<td>²Y₆ = 33.64%</td>
</tr>
<tr>
<td>[SES + IQ + GPA] + POEx + SCA → EdAsp</td>
<td>.5895</td>
<td>²Y₇ = 34.75%</td>
</tr>
</tbody>
</table>

The statistical significance of the differences in the obtained explained variances will now be dealt with in terms of the research hypotheses developed in this study.

**Criterion variables plus SCA**

It has been hypothesized that the explained variance in educational aspirations obtained when using the set of variables made up of SES, IQ, and GPA would be smaller than that obtained when the self-concept of academic ability is added to this configuration of predictors. This hypothesis may be written as:

\[ r_{Y_5}^2 > r_{Y_1}^2 \]

In the form of the null hypothesis, the above becomes:

\[ r_{Y_5}^2 = r_{Y_1}^2 \]
Table 4.2 shows that the $r^2$ computed when using the set of criterion variables is significantly smaller than the $r^2$ found when using the criterion variables plus SCA.

**Table 4.2**

<table>
<thead>
<tr>
<th>Configuration of Variables</th>
<th>Multiple r</th>
<th>$r^2$</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES + IQ + GPA</td>
<td>EdAsp</td>
<td>.4422</td>
<td>.1954</td>
</tr>
<tr>
<td>[SES + IQ + GPA] + SCA</td>
<td>EdAsp</td>
<td>.5242</td>
<td>.2714*</td>
</tr>
</tbody>
</table>

* Significant at $\alpha = .05$ with 3/1112 degrees of freedom

**Criterion variables plus POEx**

Similarly, by adding the perceived expectations of others to the set of traditional variables, the hypothesized outcome would be a significant increase in explained variance. This is shown by:

$$
\frac{r^2_{Y'}}{r^2_{Y_{-6}}} > \frac{r^2_{Y}}{r^2_{Y_{-1}}}
$$

The null hypothesis form for this appears as:

$$
\frac{r^2_{Y'}}{r^2_{Y_{-6}}} = \frac{r^2_{Y}}{r^2_{Y_{-1}}}
$$

The increase in the explained variance obtained after adding POEx to the set of traditional variables is statistically significant, as shown in Table 4.3.
TABLE 4.3

R, R², AND F VALUES FOR SET OF TRADITIONAL VARIABLES AND THE SET OF TRADITIONAL VARIABLES PLUS POEx

<table>
<thead>
<tr>
<th>Configuration of Variables</th>
<th>Multiple r</th>
<th>r²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES + IQ + GPA</td>
<td>EdAsp</td>
<td>.4422</td>
<td>.1954 *</td>
</tr>
<tr>
<td>[SES + IQ + GPA] + POEx</td>
<td>EdAsp</td>
<td>.3364</td>
<td>.3364</td>
</tr>
</tbody>
</table>

Significant at α = .05 with 3/1112 degrees of freedom.

Thus the null hypothesis is rejected and the research hypothesis that the perceived expectations of others adds to the predictive efficiency of the traditional variables is accepted.

**Criterion variables plus SCA + POEx**

The hypothesis that the addition of the set of social psychological variables to the set of traditional variables would significantly increase the explained variance over that found by the use of the set of traditional variables alone appears as:

\[
\frac{r_{Y_7}^2}{r_{Y_1}^2} \gg \frac{r_{Y_1}^2}{r_{Y_1}^2}
\]

The null hypothesis to be tested is:

\[
\frac{r_{Y_7}^2}{r_{Y_1}^2} = \frac{r_{Y_1}^2}{r_{Y_1}^2}
\]

This null hypothesis may also be rejected as indicated by the values shown in Table 4.4. The obtained \( r^2 \) when using the traditional variables in conjunction with the social psychological variables is significantly greater than that obtained when using only the set of traditional variables.
### TABLE 4.4

<table>
<thead>
<tr>
<th>Configuration of Variables</th>
<th>Multiple r</th>
<th>$r^2$</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES + IQ + GPA EdAsp</td>
<td>.4422</td>
<td>.1954</td>
<td></td>
</tr>
<tr>
<td>[SES + IQ + GPA] + POEx + SCA EdAsp</td>
<td>.5895</td>
<td>.3475</td>
<td>59.66</td>
</tr>
</tbody>
</table>

*Significant at $\alpha = .05$ with 3/1111 degrees of freedom.

The predictive worth of each of the social psychological variables may be ascertained by comparing the $r^2$ obtained when using all variables evaluated. One would hypothesize that the explained variance found when using all variables would be greater than the explained variance obtained when using all but POEx. Thus,

\[
{r_Y}^2 > \frac{2}{5} {r_Y'}^2
\]

The null hypothesis for this relationship appears as:

\[
{r_Y}^2 = \frac{2}{5} {r_Y'}^2
\]

Table 4.5 shows that the difference in the obtained explained variances when using the perceived expectations of others in conjunction with all other variables, as compared to that obtained when not using the perceived expectations of others, is statistically significant. POEx does contribute uniquely and independently to the prediction of educational aspiration, as indicated by the present data.
TABLE 4.5

<table>
<thead>
<tr>
<th>Configuration of Variables</th>
<th>Multiple r</th>
<th>r²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>[SES + IQ + SPA] + SCA → EdAsp</td>
<td>.5242</td>
<td>.2714</td>
<td>32.41*</td>
</tr>
<tr>
<td>[SES + IQ + GPA] + POEx + SCA → EdAsp</td>
<td>.5895</td>
<td>.3475</td>
<td></td>
</tr>
</tbody>
</table>

* Significant at α = .05 with 4/1111 degrees of freedom.

In a similar fashion, the r² found when using all of the variables presently being studied is hypothesized to be significantly larger than the r² obtained when using all the variables except the self-concept of academic ability. This is shown by:

\[ r_{Y}^2 \geq r_{Y'}^2 \]

Shown in the null hypothesis form, this is:

\[ r_{Y}^2 = r_{Y'}^2 \]

This null hypothesis is supported by the results shown in Table 4.6. The research hypothesis is rejected; the present data show that the self-concept of academic ability does not add significantly to the prediction of educational aspiration over that contributed by SES, IQ, GPA, and POEx. This conclusion appears to be in contradiction to the finding that significant beta weights are associated with SCA, (see Appendix F) as well as the rather large direct correlation between SCA and EdAsp. This apparent contradiction will be discussed later.
TABLE 4.6

F TEST TO DETERMINE IF SCA CONTRIBUTES TO THE PREDICTION OF EdAsp

<table>
<thead>
<tr>
<th>Configuration of Variables</th>
<th>Multiple r</th>
<th>$r^2$</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>[SES + IQ + GPA] + POEx $\rightarrow$ EdAsp</td>
<td>.58004</td>
<td>.3364</td>
<td>4.72*</td>
</tr>
<tr>
<td>[SES + IQ + GPA] + POEx + SCA $\rightarrow$ EdAsp</td>
<td>.5895</td>
<td>.3475</td>
<td></td>
</tr>
</tbody>
</table>

*Not significant at $\alpha = .05$ with 4/111 degrees of freedom.

Criterion variables versus SCA

When assessing the difference in obtained explained variances between the set of traditional variables and that found using SCA alone, the null hypothesis of no difference is shown by:

$$r_{Y_2}^2 > r_{Y_1}^2$$

The results of the F test for the significance of the obtained differences in $r^2$'s is shown in Table 4.7. The self-concept of academic ability is a significantly more accurate predictor of educational aspirations than is the set of variables made up of SES, IQ, and GPA.

TABLE 4.7

R, $r^2$, AND F VALUES FOR THE SET OF TRADITIONAL VARIABLES AND FOR SCA ALONE

<table>
<thead>
<tr>
<th>Configuration of Variables</th>
<th>Multiple r</th>
<th>$r^2$</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES + IQ + GPA $\rightarrow$ EdAsp</td>
<td>.4422</td>
<td>.1954</td>
<td>* 35.93</td>
</tr>
<tr>
<td>SCA $\rightarrow$ EdAsp</td>
<td>.4942</td>
<td>.2442</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at $\alpha = .05$ with 2/1113 degrees of freedom.

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Criterion variables versus POEx

The null hypothesis shown by:

$$r_{Y_3}^2 = r_{Y_1}^2$$

represents the hypothesis of no difference in obtained $r^2$'s when using the perceived expectations of others as against the use of the traditional variables to predict educational aspirations. The results presented in Table 4.8 show that the null hypothesis must be rejected and that POEx predicts a significantly greater amount of the variance in educational aspirations of students than does the set of traditional predictors.

<table>
<thead>
<tr>
<th>Configurations of Variables</th>
<th>Multiple $r$</th>
<th>$r^2$</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES + IQ + GPA $\Rightarrow$ EdAsp</td>
<td>.4422</td>
<td>.1954</td>
<td>90.11*</td>
</tr>
<tr>
<td>POEx $\Rightarrow$ EdAsp</td>
<td>.5545</td>
<td>.3075</td>
<td></td>
</tr>
</tbody>
</table>

* Significant at $\alpha = .05$ with 2/1113 degrees of freedom.

Criterion variables versus POEx + SCA

As would be expected from the foregoing findings, the null hypothesis of no difference in explained variances obtained from the use of the traditional variables and from the use of the social psychological variables as a set, shown by:

$$r_{Y_4}^2 = r_{Y_1}^2$$

can be rejected. Table 4.9 shows the results of this $F$ test. The
social psychological variables used conjointly are significantly more accurate predictors of educational aspiration than are the traditional variables.

<table>
<thead>
<tr>
<th>TABLE 4.9</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>R, R², AND F VALUES FOR THE SET OF TRADITIONAL VARIABLES AND FOR POEx + SCA</strong></td>
</tr>
<tr>
<td>Configuration of Variables</td>
</tr>
<tr>
<td>SES + IQ + GPA ➔ EdAsp</td>
</tr>
<tr>
<td>POEx + SCA ➔ EdAsp</td>
</tr>
</tbody>
</table>

*Significant at α = .05 with 2/1113 degrees of freedom.

Summary

Briefly stated, the major findings of this research are that knowledge of certain social psychological variables enhances the predictive efficiency of the set of traditional variables made up of socioeconomic status, measured intelligence, and past school achievement. The self-concept of academic ability does not significantly increase the obtained explained variance in educational aspirations over that found through the use of the traditional variables plus the perceived expectations of others. However, SCA is significantly correlated with educational aspirations, and the beta coefficients associated with SCA are larger in every regression analysis computed than are the beta weights associated with SES or IQ. When SCA and POEx are treated as a set, there is significantly more accuracy in the prediction of educational aspirations than when predicting from knowledge of the set of traditional variables.
CHAPTER IV
SUMMARY, CONCLUSIONS, AND SUGGESTIONS FOR FURTHER RESEARCH

Summary of the Study

Objectives and conceptualization of the problem

With the aim of clarifying and, hopefully, adding to the existing sociological, psychological and educational knowledge of the desires of young people, it has been the purpose of this research to examine the predictive efficiency of selected social psychological variables, individually and in combination, both against and with a criterion of traditionally established predictors of aspirations. The social psychological variables were the perceived expectations of others and the self-concept of academic ability. The traditional predictors, arrived at from knowledge of the previous research done in this area, were socio-economic status level, measured intelligence, and past school achievement. The major dependent variable, educational aspirations, was conceptualized as a category of self-conceptualization concerned with a desired future state for self; as such it is conceptually distinguished from the notion of rather more realistic plans for the future.

Procedure

The sample studied in this research was make up of white students pursuing the regular tenth grade course of study in a large mid-western city during the 1963-64 academic year, and for whom complete

60
data were available. The data on the dependent variable were col-
lected in the 1963-1964 school year when the subjects were in the
tenth grade, while the data on all independent variables were gather-
ed the previous year. The total number of students in the sample
was 1116.

The instrumentation and operational definitions of the varia-
bles were as follows:

1. Socio-economic status (SES) level was determined through
the use of the *Duncan Socio-economic Index for All Occupations*.

2. Measured intelligence (IQ) was ascertained by administra-
tion of the California Test of Mental Maturity.

3. Past school achievement was operationally defined as the
grade-point-average (GPA) in English, mathematics, social studies,
and science.

4. The self-concept of academic ability (SCA) was measured
through the use of the *Michigan State Self-Concept of Ability Scale*.

5. The perceptions of expectations held by others (POEx) was
arrived at by summing the responses to three questions aimed at
ascertaining the expectations of others from three regions of the
students' social milieu, i.e., parents, friends, and teachers. Ini-
tially these three items were intended to be used as separate
variables. However, the measures of these three specific variables
were so similar that the question of the independence of the meas-
ures was raised. In order to avoid questionable interpretability,
the variable used in the actual analysis of the data was the more
general "expectations of others." The questions used to measure
these variables were worded: "How far do your parents expect you to go in school?" The questions pertaining to expectations held by friends and teachers were constructed in the same manner. Seven alternatives ranging from "Quit now" to "Graduate work beyond college" were given the respondents.

6. Educational aspirations were measured by asking the question, "If you were free to go as far in school as you wanted to, how far would you go?" The same alternative responses were offered to this question as to the questions concerning the expectations of others.

Multiple regression analysis was used to ascertain the efficiency in predicting educational aspirations to be found when using the following variables and configurations of variables.

1. Socio-economic status level (SES), measured intelligence (IQ), and past school achievement (GPA); these were referred to as the traditional variables.

2. The self-concept of academic ability (SCA).

3. The perceived expectations of others (POEx).

4. SCA + POEx.

5. [SES + IQ + GPA] + SCA.

6. [SES + IQ + GPA] + POEx.

7. [SES + IQ + GPA] + POEx + SCA.

The explained variances obtained from these configurations of variables were tested for statistically significant differences through the use of the F test of the analysis of variance, and the .05 level was adopted as the criterion for significance.
Important Findings

1. The set of traditional variables made up of SES, IQ, and GPA, and measured while the students were in the ninth grade, were 19.5% accurate in predicting the educational aspirations measured when those students were in the tenth grade.

2. The self-concept of academic ability, also measured when the subjects were in the ninth grade, predicted the educational aspirations of the students when they were in the tenth grade with 24.4% accuracy. This increase in predictive efficiency over that found by the use of the traditional variables was statistically significant.

3. The perceived expectations of others predicted with 30.75% accuracy the educational aspirations of students; again, the measurement of educational aspirations were made the year after that of the perceived expectations of others. This is also a statistically significant increase in accuracy of prediction from that found by using the set of traditional variables.

4. Used together, SCA and POEx predicted educational aspirations with 33.64% accuracy. This, too, was a significant increase from the predictive efficiency of the traditional variables.

5. By adding either SCA or POEx to the set of traditional variables, a significant increase in predictive efficiency was found. When adding SCA, the increase was from 19.5% when using SES, IQ, and GPA to 27.14% when using SES, IQ, GPA, plus SCA. By adding the POEx, the resulting increase is from 19.5% to 33.64%.
6. The perceived expectations of others was found to significantly add to the prediction of educational aspirations when assessed in conjunction with the other four independent variables. The self-concept of academic ability was found to not significantly increase the predictive efficiency when it was assessed conjointly with the other independent variables.

Conclusions

On the basis of the research described above, the following conclusions have been drawn:

1. The perceived expectations of others is an important variable to consider when attempting to account for aspirations. While this conclusion supports some of the studies reviewed in Chapter I, it should be emphasized that this variable has not been adequately studied in relation to desires which people hold.

2. While the self-concept of academic ability does not add significantly to the prediction of aspirations, it should not be pre-emptorily dismissed as an important variable affecting aspirations. The significant relationship between SCA and EdAsp, appearing in both multivariate and univariate analyses, leads the present researcher to conclude that this variable warrants further theoretical and empirical investigation.

3. Of the set of variables which has in this study been called the traditional predictors of aspiration, measured intelligence is consistently a very weak predictor of educational aspiration. This empirical finding coupled with the research objective of developing a parsimonious set of predictors of educational aspirations leads
this researcher to tentatively conclude that IQ need not be included in a group of predictors of educational aspiration.

4. While the predictive efficiency of the set of social psychological variables used in this study was not significantly less than that of the social psychological variables used in conjunction with the set of traditional variables, the results of the multiple regression analyses lead the author to reassert the worth of past school achievement and to a much lesser extent, and in a more tentative manner, socio-economic status level as predictors of aspiration.

5. Given the fruitful distinction between plans and aspirations as desires, the theoretical consideration that aspirations are a category of self-conceptualization concerned with desired future status for self is an aid in guiding both thought and research concerned with this topic. The value of this approach lies in the use of social psychological variables to account for social psychological phenomena; this facilitates the often espoused but somewhat less often realized link between theory and research.

Suggestions for Further Research

In terms of comprehending the complexity of aspiration development, there are numerous limitations apparent in this study. Quite obviously not all of the predictors of aspirations were utilized. There are many social psychological, social structural, and person variables which were not taken into account. In addition, the variables of this study were not fully investigated due to methodo-
logical and logistical limitations. For example, the perceived expectations of others were initially intended to be analyzed so as to discover the individual contributions to desires made by parents, friends, and teachers. However, the measures of the components were so highly intercorrelated that this objective was not realized.

It has also been theorized that the self-concept of ability operates as a threshold variable. Hence further research should study the effects of SCA on aspirations when in interaction with other variables. This analysis was not carried out in this research, and might explain findings significant beta weights associated with SCA and the significant linear correlation between SCA and aspirations, while SCA still did not uniquely contribute to the prediction of EdAsp when assessed additively with the other independent variables.

Replications of the present study are in order. Research maintaining the longitude nature of the present study while eliminating the limitations discussed above would constitute a contribution to the fields of sociological, psychological, and educational research. Such research should make independent measures of the perceived expectations of specified others in the social milieu, and investigate the interactive effects of the self-concept of ability, while at the same time taking into account other theoretically derived variables.

Other possible important variables that should be studied in

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Aspirations as a category of self-conceptualizations are obviously not limited to the sphere of education. Aspirations in the area of occupation, income, and social movement-oriented desires, e.g., civil rights, should be investigated.

Research of considerable worth which would contribute to knowledge of both aspirations and self-conceptualizations would consider the relationship among the actual perceptions of others, the perceived expectations of others, and aspiration-type self-conceptualizations. This is again developed from Kinch's model. If this theorized relationship between the actual expectations of others and aspirations is found, the causal connection between these two observed events might be explained in terms of the linkage among the perceived expectations of others and the self-concept of ability as intervening variables. Other self-conceptualizations may also be interacting in this process, such as conceptualizations of the value

\[1\] See pages 8-9.
intrinsic and instrumental, which the individual attaches to the expectations. This type of research would be a logical extension of the present study, with the focus on the linkages among the social psychological constructs. The model developed in such a study would appear as:

\[
A_{\text{ex}} \rightarrow \text{POEx} \rightarrow \text{SCI}_1 \rightarrow A_{\text{sp}}
\]

where \( A_{\text{ex}} \) = actual expectations of others

\( \text{POEx} \) = perceived expectations of others

\( \text{SCI}_1 \) = self-concept of ability in role task

\( \text{SCI}_2 \) = self-concept of the intrinsic value for self

\( \text{SCI}_3 \) = self-concept of the instrumental value for self

\( A_{\text{sp}} \) = aspiration

Closing Statement

This research has investigated the desires which youth hold in the area of future educational attainment. The problems encountered were neither unique nor easily solved; the reported results were not entirely surprising. It is certainly plausible that the educational attainment aspirations of students can be forecast with some accuracy from a knowledge of what the students think important people in their lives expect them to do, and their past reinforcement histories while in school. While it was not conclusively shown that these factors influence the individual via his conceptions of self, neither

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was this notion totally discounted.

Educators wishing students to aspire to certain educational levels should note that the social psychological variables studied herein are much more amenable to manipulation than are the omnibus factors of socio-economic status or intelligence. These social psychological phenomena are also somewhat more subject to control than the in large part institutionally managed process whereby the symbols of success in school are bestowed upon some individuals and not others. Teachers, administrators, and guidance personnel could profit from an increased knowledge in this area of social scientific endeavor.

While philosophical, ideological, and political issues are immediately encountered when addressing the topic of the consonance between present desires and later events, desires are nonetheless an important factor in the life of human beings, and cannot be discounted as an area of concern within social science. It is hoped that the suggestions for further research incorporated into the final chapter of this report will encourage both thought and research by others holding an interest in this topic.
APPENDIX A

THE PERCEIVED EXPECTATIONS OF PARENTS

Circle the letter in front of the statement which best answers each question.

How far do your parents expect you to go in school?

a. They expect me to quit as soon as I can.
b. They expect me to go to high school for a while.
c. They expect me to graduate from high school.
d. They expect me to go to business or technical school.
e. They expect me to go to college for a while.
f. They expect me to graduate from college.
g. They expect me to do graduate work beyond college.
APPENDIX B

THE PERCEIVED EXPECTATIONS OF FRIENDS

Circle the letter in front of the statement which best answers each question.

How far do your friends expect you to go in school?

a. They expect me to quit as soon as I can.
b. They expect me to go to high school for a while.
c. They expect me to graduate from high school.
d. They expect me to go to business or technical school.
e. They expect me to go to college for a while.
f. They expect me to graduate from college.
g. They expect me to do graduate work beyond college.
APPENDIX C

THE PERCEIVED EXPECTATIONS OF TEACHERS

Circle the letter in front of the statement which best answers each question.

How far do your teachers expect you to go in school?

a. They expect me to quit as soon as I can.
b. They expect me to go to high school for a while.
c. They expect me to graduate from high school.
d. They expect me to go business or technical school.
e. They expect me to go to college for a while.
f. They expect me to graduate from college.
g. They expect me to do graduate work beyond college.
APPENDIX D

SELF-CONCEPT OF ABILITY - GENERAL

Circle the letter in front of the statement which best answers each question.

1. How do you rate yourself in school ability compared with your close friends?
   a. I am the best
   b. I am above average
   c. I am average
   d. I am below average
   e. I am the poorest

2. How do you rate yourself in school ability compared with those in your class at school?
   a. I am among the best
   b. I am above average
   c. I am average
   d. I am below average
   e. I am among the poorest

3. Where do you think you would rank in your class in high school?
   a. among the best
   b. above average
   c. average
   d. below average
   e. among the poorest

4. Do you think you have the ability to complete college?
   a. yes, definitely
   b. yes, probable
   c. not sure either way
   d. probably not
   e. no

5. Where do you think you would rank in your class in college?
   a. among the best
   b. above average
   c. average
   d. below average
   e. among the poorest
6. In order to become a doctor, lawyer, or university professor, work beyond four years of college is necessary. How likely do you think it is that you could complete such advanced work?

a. very likely  
b. somewhat likely  
c. not sure either way  
d. unlikely  
e. most unlikely

7. Forget for a moment how others grade your work. In your own opinion how good do you think your work is?

a. my work is excellent  
b. my work is good  
c. my work is average  
d. my work is below average  
e. my work is much below average

8. What kind of grades do you think you are capable of getting?

a. mostly A's  
b. mostly B's  
c. mostly C's  
d. mostly D's  
e. mostly E's
Appendix E

Educational Aspirations

Circle the letter in front of the statement which best answers the question.

If you were free to go as far as you wanted in school, how far would you like to go?

a. I think I would quit as soon as I can.
b. I think I would go to high school for a while.
c. I think I would graduate from high school.
d. I think I would go to business or technical school.
e. I think I would go to college for a while.
f. I think I would graduate from college.
g. I think I would do graduate work beyond college.
# APPENDIX F

RESULTS OF REGRESSION ANALYSES OF VARIOUS CONFIGURATIONS OF VARIABLES USED IN THE PREDICTION OF EDUCATIONAL ASPIRATIONS

<table>
<thead>
<tr>
<th>Configuration of Variables</th>
<th>Beta Coefficients</th>
<th>Regression Constant</th>
<th>Multiple r</th>
<th>Explained Variance ($r^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES + IQ + GPA $\rightarrow$ EdAsp</td>
<td>$b_{SES} = .010$  $b_{IQ} = .015$  $b_{GPA} = .501$</td>
<td>$a = 2.13$  $r = .442$</td>
<td>$r^2 = .195$</td>
<td></td>
</tr>
<tr>
<td>SCA + POEx $\rightarrow$ EdAsp</td>
<td>$b_{SCA} = .074$  $b_{POEx} = .154$</td>
<td>$a = .96$  $r = .580$</td>
<td>$r^2 = .336$</td>
<td></td>
</tr>
<tr>
<td>[SES + IQ + GPA] + SCA $\rightarrow$ EdAsp</td>
<td>$b_{SES} = .007$  $b_{IQ} = .007$  $b_{GPA} = .213$  $b_{SCA} = .118$</td>
<td>$a = .554$  $r = .524$</td>
<td>$r^2 = .271$</td>
<td></td>
</tr>
<tr>
<td>[SES + IQ + GPA] + POEx $\rightarrow$ EdAsp</td>
<td>$b_{SES} = .004$  $b_{IQ} = .005$  $b_{GPA} = .266$  $b_{POEx} = .170$</td>
<td>$a = 1.51$  $r = .580$</td>
<td>$r^2 = .336$</td>
<td></td>
</tr>
<tr>
<td>[SES + IQ + GPA] + POEx + SCA $\rightarrow$ EdAsp</td>
<td>$b_{SES} = .004$  $b_{IQ} = .003$  $b_{GPA} = .177$  $b_{POEx} = .143$  $b_{SCA} = .052$</td>
<td>$a = .915$  $r = .590$</td>
<td>$r^2 = .348$</td>
<td></td>
</tr>
</tbody>
</table>
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