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## TOWARD AN ECOLOGY OF YOUTH CAREER DEVELOPMENT: AN ANALYSIS OF CAREER DEVELOPMENT OF SOUTHERN, LOW-INCOME, RURAL YOUTH

Ву

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# A DISSERTATION

# Submitted to Michigan State University in partial fulfillment of the requirements for the degree of

# DOCTOR OF PHILOSOPHY

Department of Family and Child Ecology

#### ABSTRACT

#### TOWARD AN ECOLOGY OF YOUTH CAREER DEVELOPMENT: AN ANALYSIS OF CAREER DEVELOPMENT OF SOUTHERN, LOW-INCOME, RURAL YOUTH

Вy

#### Chong-Hee Yoon Chin

The primary purpose of the study was to examine the selected predictors of family background, child characteristics, significant others' influence, achievement motivation (i.e., educational and occupational aspirations and expectations), and educational attainment on youth occupational attainment. The secondary purpose was to conceptualize youth career development from an ecological perspective. As a final analysis, an effort has been made to assess the relative importance of these environments on youth career development, particularly the long-term effect of the family on this important process.

The population for the original study represented youth from six southern states (Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia). The present study was based on a secondary analysis of longitudinal data involving three phases of assessment: 1969, 1975, and 1979. The unit of analysis was 544 individuals who were followed up over ten years, beginning when they were in the fifth (sixth) grades, and continuing through four years after high school. The path modeling techniques utilized were based on status-attainment research. The effects were analyzed with sex and race controlled.

While the findings indicated the total explanatory power of the proposed model ( $R^2 = .38$ ), a direct effect of the selected predictors on youth career development was observed only for achievement motivation and educational attainment. Indirect effects of the remaining variables were mediated through achievement motivation and educational attainment. These indirect effects were, however, worth noting because their magnitudes were comparable to the direct effects. For example, the indirect effect of either family background or child characteristics exceeded the direct effect of youth educational attainment. The indirect effect of the family was second only to the total effect of achievement motivation in predicting occupational attainment.

In conclusion, the results of the path analysis explained the contributions (both direct and indirect effects) of a broad range of ecological factors to youth career development. It was found that the family makes significant contributions to the attainment of educational and occupational goals. By using a path analysis, it was possible to fully appreciate the total influence or effects (direct and indirect) of the family on these important outcomes. To my Mother and my late Grandmother: For nurturing a love for learning in their daughters

### ACKNOWLEDGMENTS

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#### CHAPTER I

### INTRODUCTION

# Background of Problem

The area of career development of youth has received wide-ranging attention from researchers.<sup>1</sup> There appear to be at least two important practical reasons for interest in studying the occupational choice process. First, occupation is the means of livelihood for the vast majority of the population. Secondly, many people's sense of self-respect and/or life-satisfaction depends in large measure on the type of work they do. In a highly technological society such as the United States, where specialization is the rule and not the exception, the selection of an occupation has become one of the most important decisions individuals ever Indeed, it is an important dimension make in their lives. of future plans of adolescents, since it determines how they will spend most of their time, effort, and energy in later years, affecting their overall life satisfaction. As Hall (1979) notes, the choice of an occupation by the individual is the difference between satisfaction and frustration experienced in later years.

<sup>&</sup>lt;sup>1</sup>In 1970, Kuvlesky and Reynolds cited 818 papers in their references related to occupational aspirations and expectations (Turner, 1983).

Despite the importance of career choice and its impact on an individual's life, the scientific literature about the career choice process of youth indicates that not all young people are directed into the most productive and rewarding jobs. Although equal opportunity is an American ideal, there is a growing realization that opportunities or "life chances" are not equal for all Americans. Various subgroups face the problem of occupational choice from a disadvantageous point of having "inherent" limitations placed on them from the very beginning of the choice Specifically, factors over which the individual process. control -- such as race, sex, initial has no lower socioeconomic status, and rural-urban residence -- compound the problem of satisfactory career choice.

For rural youth, as an example, occupational choices are limited as a consequence of geographical area. Many experience a lack of employment opportunities as the diversity of industry and occupations found in the urban areas is severely limited in isolated rural towns. They may also be at a disadvantage regarding quality of education, and may have lowered expectations as a result of parental influence. The expectations parents have for the upward mobility of their children may be limited. Their problems in making occupational choices are compounded with lowincome levels and depressed economic conditions in general.

Like rural youth, for minority youth and low-income youth, occupational attainment may not provide the basis for any type of fulfillment. Although they may initially indicate preferred status occupations, the final result for these youths is not in systematically attaining a job, but in haphazardly "ending up" in doing something. What the outcome of this process means for society as a whole is What is known is that talent is certainly uncertain. wasted, and the social and economic systems are frequently perceived as unfair, generating anomie and futility. If equality of opportunity is to be made a reality, then, affirmative action programs must be directed toward these disadvantaged groups. Furthermore, the impact of such programs must be felt before career patterns and personal characteristics are "set."

Although numerous studies have identified several important factors that are related to the successful career outcome of the general population of youth, heretofore, the focus of these studies has been youth aspirations and motivations regarding educational and occupational and the general physical, behavioral attainment, and familial environment of the individual focused on late adolescent years. While considerable research has been done in the area of status aspirations and attainments for the high school years and beyond, little has been done to study

the formation and dynamics of career development beginning with the earlier years.

Likewise, the purpose of investigations on the occupational aspirations and attainments of low-income rural vouth has been to delineate factors that affect the occupational choice process. As an example, sex and race important structural variables that found to be are influence occupational choice (Cosby and Picou, 1973; McCleandon, 1976; Spitz and Waite, 1980). Socialpsychological variables such as parental influence, selfesteem and academic conditions also affect aspirations (Williams, 1972; Brook, Whiteman, Lukeoff and Gordon, 1979; Kandel and Lesser, 1969; Osborn, 1971). The primary goal of these studies has been to analyze the factors that lowyouth experience, both in terms of socialincome psychological and structural variables, that influence satisfactory occupational attainment. In addition, such research provides some insight into the obstacles to goal attainment which are faced by this group.

Seldom have social scientists, educators and policy makers examined the career development process of youth in its entirety. That is, there has not been a significant effort to utilize longitudinal designs, with a focus on youth as a functioning microunit of the society making adaptations necessary to function in a complex social milieu. Seldom has the focus of such research been on the

long range process of career development, beginning with the early years in the family setting, with careful attention to parental influence and socialization and to the reciprocal relationship of youth characteristics and environmental contexts. Such an interactive viewpoint may be considered an <u>ecological</u> perspective (Bronfenbrenner, 1979).

# Purpose of the Study

In view of what has been discussed so far, the present study is designed to examine the factors contributing to and/or inhibiting low-income youth career development, with specific attention to the dynamics of the career development process. In this study, individual youth career development is viewed as an interaction/transaction between the individual and his/her environment, beginning with the family setting in early years. The issue was treated from such an ecological perspective, covering a period of ten years in the low-income youth's life: from fifth (or sixth) grade through the junior (or senior) year in high school and four years later.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup>The present investigator is involved in the coding process of the interview data collected in the third phase (S-171) of the original investigation -- the Regional Projects S-63, S-126, and S-171, titled as "Influence on Occupational Goals of Young People in the Three Southern Subcultures," supported by the United States Department of Agricultural Cooperative State Research Service in six southern states (see pp. 52-53). The idea of an ecological study is conceived under the supervision of Dr. Lawrence Schiamberg of Michigan State University who is one of the seven principal coinvestigators of the original study. The

This kind of ecological study and longitudinal data allow the researcher to see how early relationships are established between the context of development and occupational outcomes, and how and when changes are possible. From a practical standpoint, the findings of this research can be used by families, schools and educational agencies to identify and clarify appropriate intervention strategies for parents, teachers, and/or policy makers in order to maximize career prospects of youth.

# **Research Question**

The overall research question is as follows: "How do selected ecological factors predict occupational choice (attainment) of rural, low-income youth over time?" The primary goal is to describe and analyze the impact of these factors and especially how they are related to successful career outcomes. For intervention purposes, it is of crucial importance to identify those factors that contribute positively to successful career attainment among the lowincome group and the trend for successful career development among these groupings. To put it simply, it will enable us to understand how or when to intervene in order to make a difference in occupational status for an individual. A

reasons for an ecological study and some limitations imposed by the original data are further discussed under the limitations and basic assumptions section.

secondary purpose is to formulate a model for adolescent career development, using an ecological approach.

More specifically, the present study attempts to deal with the following questions:

projections at an earlier stage?

To what extent are the selected predictors (e.g., family background factors, child characteristics, significant others' influences, youth achievement motivation<sup>1</sup>, and educational attainment) related to successful career outcomes of low-income youth?
How do these selected predictors relate to career

Are there identifiable trends among selected predictors over time from the preadolescent period through high school to the post-high school period?
How do the results of the study differ from similar investigations of the general population of youth?

5. What are the factors that might be manipulated for intervention purposes to maximize career prospects of youth?

 $<sup>^1</sup>$ In this study, youth achievement motivation refers to educational and occupational aspirations and expectations. For a detailed description of the term as used in this study, refer to "Conceptual and Operational Definitions of Variables" section in pp. 56-63.

For a detailed discussion of the psychological definition of achievement motivation, see Dweck and Elliot (1983). Typically in psychology, achievement motivation deals with motivational factors other than ability that affect learning and performance.

## **Conceptual Framework**

An ecological perspective is taken by the present investigator in approaching the issue of career development low-income Two major of rural. youth. theoretical frameworks on human development are chosen as the basis for the conceptual framework of this study: Bronfenbrenner's (1979) theory of "Human Development" and the "Family Ecosystem Framework" of Bubolz, Eicher, and Sontag (1979). The former is chosen as an overarching framework to justify the present investigation as an ecologically valid study while the latter is chosen to conceptualize the spatial and temporal dimensions of ecological contexts of youth career development. This section describes Bronfenbrenner's theory application to the present research. The and its application of the Ecosystem model (Bubolz et al., 1979) to the study of career development is further elaborated and presented in the last section of Chapter Two, in conjunction with the ecological/path model of the present investigation. Bronfenbrenner's Approach

Bronfenbrenner (1979) defines the ecology of human development as "the scientific study of the progressive mutual accommodation between an active, growing human being and the changing properties of the immediate settings in which the developing person lives, as this process is affected by relations between these settings and by the larger context in which the settings are embedded" (p.21).

He contends that an ecological approach to the study of any living thing has three major components: the organism, the environment, and the interactions between these two components. Bronfenbrenner further specifies the organism as the individual, and defines the layers of the environment which surround the individual as the micro-, meso-, exo-, and macro-systems. These environments have biological, psychological, sociological, physical, and economic characteristics which influence the development of the individual.

Bronfenbrenner's (1979) microsystem is "a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting with particular material characteristics" (p.22). physical and His mesosystem comprises "the interrelations among two or more settings in which the person actively participates" (p.25). An exosystem refers to "one or more settings that do not involve the developing person as an active participant," but what happens in the setting affects the person (p.25). The macrosystem refers to "consistencies, in the form and content of lower-order systems (micro-, meso-, and exo-) that exist, or could exist, at the level of the subculture or the culture as a whole, along with any belief systems or ideology underlying such consistencies" (p.26).

This study is designed to examine the effects of these layers of the environment of southern, low-income,

on their occupational achievement. rural youth More specifically, the present investigation is designed to the influence of the person (e.g., child assess characteristics such as mental ability, self-concept, and academic and achievement motivations), the microsystem environment (e.g., parenting values and practices. significant other's influences such as peers, teachers, neighbors, relatives, and adult friends), the mesosystem environment (e.g., the effect of schooling and other community interactions), the exosystem environment (e.g., family background factors such as parents' education and occupation, and mother's "social participation"), and the macrosystem of societal limitations/beliefs imposed on occupational achievement of these groups of youth.<sup>1</sup> Βv confining the subject of the present investigation to lowyouth, it income, rural becomes possible for other researchers to compare the findings of the present study with other groups of youth, allowing the society to see the macrosystemic differences that may exist among different social classes.

The above assumptions and conceptualization are valid according to Bronfenbrenner's (1979) theory. He states that

> ...within a given social group, the structure and substance of micro-, meso-, and exosystems tend to be similar, as if they were constructed from the same master model, and

<sup>&</sup>lt;sup>1</sup>Details of the variables selected for the study are described in Chapter three, pp. 56 - 63.

the systems function in similar ways. Conversely, between different social groups, the constituent systems may vary markedly. Hence by analyzing and comparing the micro-, meso-, and exosystems characterizing different social classes and groups it becomes possible to describe systematically and to distinguish ecological properties of these larger social contexts as environments for human development (p. 29).

Finally, the goal of an ecological study is to describe, understand, and predict the nature of interaction between the organism and its environment (Jochim, 1980). From this ecological perspective, the present study is appropriately categorized as an ecological study because the results of the investigation will help clarify the process of youth career development, with particular emphasis on the interface between low-income youth and their significant contexts of development.

# Limitations and Basic Assumptions

As a secondary analysis, this study has two limitations in exploring the research questions raised in the present investigation. One such limitation results from using the existing data set; the other results from possible bias of the present investigator in selecting variables from the original data.

The first limitation comes from the instrument and the sample of the original data set. Particularly, the data have been collected from a sample of rural, low-income youth in six southern states, using a non-probability sampling plan.<sup>1</sup> Thus, the findings of the present study can only be generalized to those groups of the youth in the settings and age groups that have been represented by the original investigation. In other words, comparisons with other youth in different socioeconomic status can only be suggested or implied, rather than firmly made, based on the findings of this study.

The second limitation results from the possible bias of the present investigator in selecting research issues and variables, and in imposing relationships over time (through the use of a path model) among the variables selected (see Table 2 on page 42 for a complete list of the variables).

The author views youth career development as a product of youth's ability as well as environmental influences such as parenting practices, significant others' influence, and other family background factors. These basic assumptions of the author may have played a role in excluding some variables which other researchers may find important. In this study, career developmental process is not treated simply as an individual adaptation process involving self-concept or personality over the life-span, a contention made earlier by some psychologists (Super, 1957; Holland, 1966). Rather, the process of youth career

 $<sup>^{1}\</sup>mbox{This}$  will be further described in detail in Chapter three.

development is treated here from an ecological perspective as encompassing an individual's development from childhood through adolescence and young adulthood, as well as the result of the reciprocal interaction with a limited environment in shaping the career outcomes of rural, lowincome youth.

An attempt has been made to balance these shortcomings. The shortcomings resulting from the second limitation (i.e., the possible bias of the present investigator in the selection of the variables) have been balanced by means of thorough literature review, while the shortcomings resulting from the original dataset are balanced through the use of the existing longitudinal design of the study, relatively large sample (N=544), and relatively sophisticated statistical methods (e.g., the path analysis, multiple classification analysis, and trend analysis). In addition, the findings of the study on rural, low-income youth are compared with other studies which used different groups of samples (e.g., middle-class, or males).

Another limitation (not resulting either from the data or from the researcher) is imposed by the ambiguities of such concepts as occupation, career, status, occupational attainment, status attainment, career development, and occupational choice. As will be discussed briefly in the review of the existing theories, fundamental concepts such as occupation, choice, and career development are not

defined adequately among scholars in the field, and hypotheses regarding those concepts are not explicit enough for such an effort to be useful. Because of the lack of clearly defined scientific, agreeable terms, this study employs these concepts interchangeably without distinction, although an attempt has been made to define occupational attainment as used in the study at a later section.

As indicated, the idea of an ecological study of career development of vouth is developed based on an existing data set, which did not specifically purport to have originally measured ecological factors. However, the present investigator saw the opportunity to do an ecological study in that data set because of its longitudinal design, variables representing different levels multiple of environmental systems of the youth, and adult-child data that included family process variables over time. Given these circumstances, the present investigator provides a way of adopting existing data sets in relation to an ecological perspective.

#### CHAPTER II

# LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

The scientific literature about occupational choice is indeed massive: existing literature is spread across a variety of academic disciplines (e.q., psychology. sociology, and economics) and theoretical perspectives. Some researchers in the area have attempted to elaborate trait-factor theories (Bell, 1940), developmental frameworks (Ginzberg, Ginsburg, Axelrad and Herma, 1951; Super, 1953, 1957), structural models (Blau and Duncan, 1967), personality models (Holland, 1966, 1973), and sociopsychological models (Sewell, Haller, and Portes, 1969; Sewell and Hauser, 1972). Others have focused on race, sex, and residence variables (Alexander and Eckland, 1974; Hall, 1979; Portes and Wilson, 1976; Trieman and Terrell, 1979); and still others have made various comparisons of rural and urban populations (Cosby and Charner, 1978; Kenkel, 1981).

This section begins with a broad overview of five major theoretical perspectives on occupational choices. Based on this overview, empirical modeling efforts will be selected and reviewed in the second section. Specifically, those studies will be reviewed which have a dynamic view of career development as an ongoing process that explicitly incorporates changes over time. This is done in an attempt

to develop the conceptual framework and an ecological model to be tested empirically in the present study.

In the final section of the review, the major variables to be used in the ecological model are presented, together with an ecological model of career development of youth. It should be noted that throughout these discussions. the terms career development. status (occupational) attainment, and occupational choice (process) are used interchangeably.<sup>1</sup> These terms as used in this study are defined in Chapter Three under the heading "Conceptual and Operational Definitions of the Variables."

#### Overview of Major Theoretical Perspectives on Occupational Choices<sup>2</sup>

The theoretical perspectives to be reviewed here are (a) Super's developmental perspective (Super, 1953, 1957), (b) Holland's typology of occupational choice (Holland, 1966, 1973), (c) Status-Attainment research in the field of sociology (Blau and Duncan, 1967), (d) Economic theories of occupational choices, notably Human Capital Theory (Thurow, 1970) and Utility theory (Ferguson and Gould, 1975), and (e)

<sup>&</sup>lt;sup>1</sup>In this area of research, fundamental concepts such as occupation, status, career, attainment, expectation, aspiration, development are not precisely differentiated. Also, the operationalization of these terms varies among researchers.

<sup>&</sup>lt;sup>2</sup>This portion of discussion is mainly a summarized version of "Theories of Occupational Choice: A Critical Assessment of Selected Viewpoints," by Hotchkiss, Black, Campbell and Garcia Jr. (1979). For an extensive discussion of these theories, refer to the above study.

a model of decision-making theory drawn from psychology (Vroom,1964).

#### Super's Theory

In vocational psychology, the concept of occupational choice connotes a static orientation associated with traitfactor theory.<sup>1</sup> Beginning with Ginzberg  $(1951)^2$  and Super (1953, 1957), the concept of career development was introduced into vocational psychology and the emphasis in this literature shifted from a static conception of matching people with jobs (Bell, 1940) to the study of an ongoing process. Three important ideas stand out in Super's (1953) theory. First is the notion that occupational and related choices occur gradually in a complicated process that occurs over an extended time (i.e., life-span process). Second is the notion that self-concept plays an important role in occupational choice. According to Super (1953, 1957), occupational choice is the process of "implementing" one's

<sup>&</sup>lt;sup>1</sup>Until about mid century, a fairly simple philosophy dominated vocational psychology. The fundamental idea in the wise choice of a vocation are three factors: a clear understanding of yourself, a knowledge of the requirements and conditions in different lines of work, and true reasoning on relations of these two groups of facts (Parsons, 1967).

<sup>&</sup>lt;sup>2</sup>Ginzberg's theory focuses on the total developmental process through three stages of occupational development, from early adolescent to the early adult years: a fantasy stage, a tentative stage and a realistic stage. The underlying notion is that as the individual progresses through the three stages of occupational development, the final stage is reached by the process of compromise, in which reality factors are weighed against available alternatives (Ginzberg, 1951).

self-concept. Third, Super emphasizes the concept of vocational maturity. In broad terms, vocational maturity includes vocational satisfaction and success (Hotchkiss et al., 1979). Super's work provides a valuable perspective from which to view occupational choice.

#### Holland's Theory

Holland's theory centers around a six-category typology. The distinctive feature of the typology is that the same categories are used to classify personality and occupations, thus generating a natural hypothesis that people match their personality type to the occupational type. Numerous variations on this theme are proposed by Holland (1964).

A large quantity of empirical work is associated with Holland's theory. The bulk of this work, as Hotchkiss et al. (1979) note, does not show very convincing support of the theory because it is based on specialized samples and relies on inappropriate analysis methods.

# Status-Attainment Theory

Status-attainment research originated with the study of social mobility in sociology. Typical mobility research depends on broad classifications of occupation into status levels. Cross status-attainment research depends on two innovations, according to Hotchkiss and his associates (1979). First, detailed procedures have been developed to assign a number measuring occupational status to each occupation. Occupational status scales have facilitated the second important innovation -- use of path analysis.<sup>1</sup>

Current status-attainment research applies path analysis to uncover the reasons why the status of father's and son's occupation are related (e.g., Blau and Duncan, Findings suggest that parental attitudes and 1967). perceptions of peers comprise an important part of the Parents at different occupational levels hold explanation. different expectations for their children. Parental expectations tend to be adopted by children, and children's expectations affect the occupation they eventually choose. Educational achievement is a critical step in this process: much of the relationship between parental occupational status and the occupational status of their children is due to the educational level achieved by the children (Blau and Duncan, 1967; Sewell et al., 1969; Bachman, O'Mally and Johnston, 1978). A large quantity of research tends to support these conclusions. Much of the research is based on national samples or comparably good quality state and local Analysis generally does incorporate relatively samples. sophisticated multivariate methods.

On the other hand, the theoretical and conceptual aspects of status-attainment work are too simplified to

<sup>&</sup>lt;sup>1</sup>Path analysis is a statistical methodology (based on regression analysis) designed to study cause-and-effect relations in the absence of experiments (Nie, Hull, Jenkins, Steinbrenner and Bent, 1975).

render a realistic picture of the process of selecting an occupation (Hotchkiss et al., 1979; Schulenberg, Vondracek, and Crouter, 1984). First, the gradual process of narrowing down one's occupational options described by Super and other vocational psychologists is not accommodated by statusattainment work. Secondly, most of the mathematical statements of status-attainment theory do not accommodate the probable reality that several of the variables exercise two-directional effects (e.g., parents affect children and children, in turn, affect parents). Finally. the mathematical statements of status attainment theory are static -- they do not account for changes over time.

# Economic Theory

Two theoretical orientations shape most economic theories of individual occupational choices: human-capital theory (Thurow, 1970) and utility theory (Ferguson and Gould, 1975). In human-capital theory people are assumed to choose occupations in order to maximize net income, properly discounted to a "present value." Net income excludes money spent on education, training and other forms of personal improvement that tends to increase one's income (Hotchkiss et al., 1979). Such forms of personal improvement that increase income are termed human capital. Income is linked to human capital through jobs. Certain human-capital accumulation is necessary to perform certain jobs, and one gets paid for performance on the job (Thurow, 1970; Becker, 1964; Bowlby and Schriver, 1973).

Utility theory includes both income and nonpecuniary factors as bases for job selections (Ferguson and Gould, 1975). According to this theory, people balance all features of jobs, including income, against constraints that prevent one from achieving all that is desired. The final choice is a compromise that maximizes overall satisfaction or "utility" subject to constraints. These ideas are expressed in mathematical terms.<sup>1</sup>

According to Hotchkiss and his associates (1979), little empirical work has been carried out in a direct effort to test an economic theory of individuals' occupational choices. One of the reasons is that the key concepts are difficult to operationalize, since economists do not generally consider utility to be measurable.

Economic theory contributes two important hypotheses that are neglected in other writings about occupational

<sup>1</sup> Maximize	u=f(x, y)	(Utility function)
Subject to	$I = P_X X + P_y Y$	(Income constraints)
х	and y ≥ 0	(Non negative quantity of goods)
where I=income,	P <sub>X</sub> and Py=the p	rice of good 1 and 2.
(Source: Hotchk	iss et al., 1979	)

choices (Hotchkiss et al., 1979). First, the importance of income as a motivating factor is emphasized; however, influence of nonpecuniary motives is also recognized explicitly. Secondly, the hypothesis that people tend to maximize satisfaction subject to constraints is developed nowhere else to the extent it is in economics. In addition, economics contributes important concepts such as "present value" that are not well understood by noneconomists.

### Decision-Making Theory

Application of decision-making theory to occupational choice is probably the least thoroughly studied perspective of occupational choice. The key concept in this theory is "valence" (Hershenson and Roth, 1966; Hilton, 1962; Kaldor and Zytowski, 1969; Mitchell and Beech, 1975; Vroom, 1964). Valence of an object such as an occupation is defined as the satisfaction it will yield. Thus, the terms valence and utility are nearly synonymous. Valence of a given choice is hypothesized to be a mathematical function of the valence of outcomes which the given choice is likely to help achieve. Valence of different choices, such as different occupations, are compared by a mathematical function. The method of comparison includes not only the valence of each occupation, but also the individual's judgement about the chance of getting into each occupation. The final selection of the occupation depends both on valence and on perceived chance of gaining entry (Hotchkiss et al., 1979). This model could

apply to all kinds of choices besides occupation, but it says nothing about factors that generate interest in different occupations. Little evidence supporting this theory for occupational choice is available. At the present decision-making theory supplies time. a source of useful, technical tools and ideas about potentially processes of choice, although these ideas have not been verified. Further, environmental variables affecting occupational choices are seldom considered in decisionmaking theory. Krumboltz's social learning theory of career selection (Krumboltz, Mitchell, and Jones, 1976; Mitchell, Jones, and Krumboltz, 1975) and other general information processing theories on career selection all fall under this category.

In this brief description of five summary, theoretical perspectives suggests that achievement of a detailed theory describing the process of occupational is not close at hand. choice Available research. nevertheless, offers useful insight into what aspects of vocational development have been studied thoroughly and thus incorporated in the theory, and what aspects have been This overlooked. has been summarized in Table 1. Understanding the strengths and weaknesses will be a step to a future improvement of theories in this area.

TheoreticalDependentIndependentPerspectivesVariable(s)Variable(s) Vocational Super Self-concept, adjustment personality trait, and "vocational maturity" OccupationalchoicePersonalitytypeiscategorizedintoonedefinedbyofHolland'ssixHolland'stypology Holland environmental types StatusOccupational choiceParentalstatus,Attainmentscaled to reflectIQ,academicTheoryprestigeperformance, significant other attitude, education Economics Labor market Income and "nonincome" utilities, "prices" or wages Theory of alternative jobs Decision Occupational choice Theory would be viewed as Theory a special case of

Table 1. Comparison Matrix of Five Theories

choice in general

(Modified from Hotchkiss et al., 1979, p.240)
Among theories that view career development as an ongoing process (such as Super's theory, Holland's theory, and Status-Attainment theory), status-attainment theory has been selected for further review because it contains a massive amount of empirical work and combines the traditional sociological viewpoint -- that factors such as social class influence occupational choice -- with a social psychological view -- that interpersonal relationships strongly influence occupational decision. Additionally, the theory is relatively easy to operationalize and is expressed in the precise language of path analysis. This discussion will eventually lead to the selection of primary variables of the present investigation and to the formulation of an ecological model of career development of low-income youth.

The Dynamic View of Occupational Choices <u>Blau and Duncan Model</u>

In contrast to the Ginzberg et al. (1951) and Super (1953) models which emphasized social-psychological factors as major components, Blau and Duncan's (1967) model went to the other extreme, focusing on structural variables to the exclusion of social-psychological factors. Their empirical efforts using path analysis have resulted in major progress in the identification of variables influencing the choice process and model building based on prediction. Following the basic assumptions of path analysis,<sup>1</sup> the causal ordering<sup>2</sup> of the variables in Blau and Duncan's model began with the father's education and occupation first, followed by the respondent's education and finally the respondent's first job, which is the dependent variable in their model. Later, the respondent's current job status is added to the existing model. These relationships and the results of their study are illustrated in Figure 1.

A national sample survey entitled "Occupational Changes in a Generation" formed the basis for the findings in Blau and Duncan's research. Blau and Duncan used a national sample of 25,000 men (20,700 respondents), representative of 45 million men, 20 to 64 years old, in the civilian, noninstitutional population of the United States, in March of 1962. Their primary purpose was to present a systematic analysis of the American occupational structure, examining social stratification and mobility.

<sup>&</sup>lt;sup>1</sup>Basically path analysis is a method of breaking down and interpreting linear relationships among sets of variables (Nie et al., 1975). Two main assumptions must be met to use the technique: (a) a causal ordering among the variables is known; and (b) the relationships among the variables are causally closed (i.e., any variation in one variable is due solely to variation in the other variable and not the result of some outside influence).

<sup>&</sup>lt;sup>2</sup>The regression coefficient cannot be interpreted as an effect coefficient. That is, it does not measure the expected changes in the dependent variable when independent variable is actually changed by one unit. It merely measures the expected difference between two groups that happen to be different on the independent variable by one unit (Nie et al., 1975).



Source: Blau and Duncan (1967:170)

Note: The symbols are defined as follows: FE = Father's education FO = Father's occupational status ED = Respondent's education OCC<sub>1</sub> = Status of respondent's first job OCC<sub>2</sub> = Status of respondent's 1962 job  $U_1$ ,  $U_2$ , and  $U_3$  = Residual variables

> Figure 1. Blau-Duncan Path Model of Occupational Status-attainment for U.S. Men Aged 20-64

The main variables included in the path analysis refer either to respondents' education or occupational status or to the educational or occupational status of the respondents' fathers. All of the occupational information is converted to Duncan SEI scores. Father's occupational status refers to fathers' occupation when the respondent was sixteen years old. Two occupational-status variables were collected for respondents, one referring to first job and one to the current job at the time of the survey. Education for fathers and sons is converted to numerical codes based on (but not equal to) the number of completed years of schooling. In addition, information was collected regarding income, family size, marital status, migration history, race, and national origin.

The structural variables they used accounted for 40 percent of the variance in occupational attainment. The importance of their model remains in their effort at establishing causal relationships between the independent variables and the dependent variable, which added more information in understanding the occupational choice process than previous studies had contributed. (For example, they found that the relationship between 1962 occupational status and the first job the respondent has was significant (path coefficient = .281). See Figure 1.)

#### Wisconsin Status Attainment Model

Research efforts that have employed path analysis began by strengthening the Blau and Duncan model. The omission of social-psychological factors was criticized and stronger theoretical underpinning were suggested in order to explain the relationships between variables.

Sewell, Haller and Portes (1969) argued that the inclusion of social-psychological factors was important, on the basis of prior research found in the literature (e.g., Super's (1957) work on self-concept), and the logical socialrelation between structural connections and psychological development. According to them. the individual's psychological makeup is developed in structured situations: an individual's actions are the results of cognitive and motivational orientations developed in fixed (structural) settings, as well as reactions to the present situation. Their work is known as "the Wisconsin Status Attainment Model."

Besides focusing on occupational attainment, the Wisconsin model was also concerned with educational attainment. It was assumed that both social-psychological structural factors influenced and not only sets of significant others effect on youth, but the individual's own assessment of ability as well. It is further assumed that the influence of significant others and the estimates that individual has of his ability subsequently affect the

educational and occupational aspirations. In addition, levels of aspiration influence levels of educational attainment, which in turn affect levels of occupational attainment. These relationships are illustrated in Figures 2 and 3.

Using 929 male subjects whose fathers were farmers, Sewell and his associates collected data from 1957 to 1964, and found that social-psychological variables did not increase the overall variability in occupational attainment  $(R^2 = .34)$ . For educational attainment, however, fifty percent of the variance was accounted for by the following independent variables: level of occupational aspiration, level of educational aspiration, significant others' influence, academic performance, socio-economic status, and mental ability (I.Q.).

In discussing these results, Sewell et al. (1969) argued that the introduction of socio-psychological factors added a great deal to the explanation of educational attainment. Hall (1979) pointed out that Blau and Duncan (1967) attempted to explain occupational attainment as it was mediated through educational attainment, while Sewell and his associates (1969) attempted to explain educational attainment and subsequently occupational attainment as it was related to education.



Figure 2. Schematic View of the "Wisconsin Model"



X1:	Parental status	Χ6:	Youth's occ.
X2:	Measured mental ability		expectation
X3:	Grade average	X7:	Educational
X4:	Composite significant		Attainment
	other educational	X8:	Occupational
	expectation of youth		Attainment
X5:	Youth's educational	е <sub>і</sub> :	Residual
	expectation	J	variables
	•		

Figure 3. Status Attainment Model Presented by Sewell, Haller, and Ohlendorf (1970) Another point of divergence between the two models is the difference in the variables and samples used. As a result, comparing the contribution of one study to another is difficult. Sewell et al. (1969) suggested that given a larger sample with greater age variation, their model would prove to be more powerful. The addition of the significant others' influence variable implies intervention strategies in terms of changing levels of attainment.

The criticism of the Wisconsin model by Hall (1979) is as follows: (a) The Wisconsin model limits theoretical explanation to relationships between variables and not to the area of occupational choice. Causally linking variables may eventually lead to theory; however, overall explanation of the occupational choice process is limited.

(b) Over emphasis on social-psychological factors may mislead others to focus on attitudinal manipulations without attention to structural limitations (e.g., race, sex, fluctuations in the job market). In terms of explained variability, Sewell and his associates explain little more variability with the addition of social-psychological variables than Blau and Duncan (1967) explained with structural variables.

(c) The model was developed, tested, and applied almost exclusively to white males (seniors in high school with farmer fathers). Consequently, it lacks generalizability.

empirical efforts of these status-attainment The researchers can be summarized as follows. Status-attainment theory grew out of sociological work on occupational mobility. Mobility research typically analyzes frequency tables in which father's occupation is the independent variable and son's occupation is the dependent variable, occupations being grouped into a small number of ordered status categories. Blau and Duncan (1967) propose to study the process by which such relationships arise and developed the method of path analysis as a vehicle for exploring such mechanisms. The fundamental prediction of the theoretical relationship between filial perspective is that the occupational status and parental statuses such as father's status can be interpreted occupational by including Education of the son is the chief intervening variables. intervening variable introduced by Blau and Duncan, and one's education does, indeed, account for a substantial portion of the total effect of parental status on filial occupational status.

The Wisconsin model adds more detailed substance to the basic Blau-Duncan idea by including significant others, youth's educational and occupational expectations, and school grades as intervening variables, and by adding a measure of mental ability. One of the main conclusions stemming from work with the Wisconsin model is that significant others are a critical link between family background and career achievement. There have been numerous successful replications and extensions of status-attainment research. Two of these are reviewed next.

# Replications and Extensions: Youth in Transition Study

With the advancement of more sophisticated research methodology, Bachman, O'Mally, and Johnston (1978) were able to identify major predictive variables with path coefficient values of each, which explain 50.6 percent of variance in educational attainment. The subjects of their study were 2,213 adolescent males chosen in 1966 to be representative of young men entering tenth grade in public high schools in the United States. Their findings are based on the five waves of the data in the "Youth in Transition" project, an eight-year longitudinal study.

One hundred ninety-nine variables were tested, of which family background factors, individual ability, and college plans and grade (ninth) explain 50.6 percent of educational attainment. Family background factors included father's occupational status. father and mother's educational level, number of rooms per person in the home, number of books in the home, checklist of other possessions in the home, and number of siblings. The individuals' ability is measured of respondents' by means the standardized scores on three tests of intelligence.

The association of occupational attainment with other variables is somewhat less clearcut and more complicated to

explain than educational outcome, but Bachman and his associates were able to come up with the predictive power of educational attainment on job status, with a range of factors designated as "personal characteristics" which includes family background, ability, values, attitudes, and early (pre high school) education experiences. The basic findings from this analysis are summarized below in Figure 4. (Bachman and his associates cautioned that with errorfree measures of all relevant personal characteristics, much stronger effects on job status are expected.)



Figure 4. Path Analysis of Factors Affecting Job Status

Most of the earlier research and theory dealing with youth career choices focused exclusively on males, and general populations of youth. Theories and research thus far reviewed reveal that little has been done to study the formation and dynamics of career development of minority youth, including females, low-income youth, or youth in The Regional Projects S-63, S-126, and S-171, rural areas. titled as "Influence on Occupational Goals of Young People Southern Subcultures." are specifically in the Three addressed to the concern of low-income, rural youth. $^{1}$ 

# Current Findings of the S-171 Project

The aim of the study (being conducted by researchers from North Carolina State University, the University of North Carolina, the University of Tennessee, the University of Kentucky. Alcorn State University (MS). Virginia Polytechnic Institute. and Alabama Agricultural and Mechanical University and Michigan State University) is to identify life experiences of rural, low-income individuals that contribute to their educational and occupational attainment. When comparing career aspirations and expectations at various age levels to attainment, one finding has been that relatively few of the young men fulfilled their career expectations. In 1969, half of the

 $<sup>^{1}\</sup>mbox{The present investigation is the secondary analysis of the data collected by the Regional Project S-63, S-126, and S-171.$ 

black fifth and sixth grade boys in the study-and half of them as high school upperclassmen-aspired to professional and technical careers. When interviewed in 1979, only 7 percent of the young men were actually working at such jobs. Fewer white males aspired to and expected to attain such high-level jobs, but more actually attained these, as well as mid-level jobs below the professional level. The personal trait that seemed to be most closely related to career attainment was self-confidence.

Of the girls, 70 percent of the whites and 75 percent of the blacks aspired to professional or technical careers when they were in grade school. The percentage dropped only slightly by the high school years. As young adults, however, only 10 percent of these women achieved their goals. The mother's educational level seemed to be the best predictor of the women's success in attaining the jobs to which they had aspired. The more education the mother had, the greater the agreement between grade school and high school career expectations and attainment.

The family, not the child's ability, seemed to be one of the primary influences on whether the young people achieved their career goals. Parental attitudes were the most significant factor in the young people's satisfaction with life at the time they began taking on adult responsibilities. The family was also significant in whether the young people chose to remain in their home communities. Among blacks, 65 percent wanted to move away. For both blacks and whites, those who wanted to remain were more likely to attain their wishes. Most of those who wanted to leave did not. Since the Regional Project S-63, S-126, and S-171 are the data source of the present investigation, they will be further discussed in more detail under the "Study Design and Subjects" section (p. 51).

As pointed out previously, the earlier research and theory focused almost exclusively on males. During the past decade, a spate of empirical papers including comparisons of status attainment processes for females to those for males have been published.<sup>1</sup> The general conclusion is that

Of the few papers focusing on career planning of youth, most have concluded that the process for females is similar to that of males (Williams, 1975, 1972; and Rehberg and Hotchkiss 1972). Although sex differences have been observed, they generally have not been large and are not yet easy to interpret theoretically (Hotchkiss et al., 1975)

<sup>&</sup>lt;sup>1</sup>For example, Alexander and Eckland 1974; Chase 1975; Featherman and Hauser 1976; Glenn, Ross, and Tully 1974; Hout and Morgan 1975; McClendon 1976; Rehberg and Hotchkiss 1972; Suter and Miller 1973; Taylor and Glenn 1976; Trieman and Terrell 1975; Tyree and Treas 1974; Williams 1975, 1972. of these papers conclude that the Three process of educational and occupational attainment of women is similar to the process for men (Featherman and Hause 1976; Trieman and Terrell 1975; and McClendon 1976). In contrast. Alexander and Eckland (1974) report that educational attainment of men depends more on measured mental ability than does the educational attainment of women; whereas, depends more on women's educational attainment status background than does that of men -- in spite of the higher achievement of women. academic Few studies support Alexander and Eckland's observation that status background is more closely related to attainment of women than of men, however. Featherman and Hause (1976), Chase (1975), and Glenn, Ross, and Tully (1974) report just the opposite, and McClendon (1976), and Trieman and Terrell (1974) observe small differences between the sexes.

traditional career development theories do not describe females adequately. A specific issue is that the salient contextual variables for male career development may be different, or of different magnitude than those for female career development. Although dealing specifically with sex differences is beyond the scope of this study, nonetheless this study, unlike many others, includes females in the total sample. Primary Variables in the Ecological Model

The theories and models thus far reviewed point to the use of path modeling as one way to understand the complex contributions of numerous ecological variables to youth occupational outcomes. Given the ecological focus of this research (as discussed in Chapter One) and drawing on the major status-attainment investigations (as reviewed in Chapter Two), the specific variables analyzed in this study reflect several critical contexts of development (e.g., the family and the school) as these interface with individual characteristics (e.g., achievement motivation<sup>1</sup>, academic motivation, mental ability and self-concept). The specific variables which were selected to predict occupational attainment included the following:

- X<sub>1</sub>: family background
- X<sub>2</sub>: child's characteristics
- $X_3$ : significant other's influence familial<sup>2</sup>
- X4: significant other's influence extra-familial<sup>2</sup>
- X<sub>5</sub>: achievement motivation -youth's educational and

occupational aspirations and expectations X<sub>6</sub>: educational attainment (post-adolescent period)

<sup>&</sup>lt;sup>1</sup>Achievement motivation is defined in this study as youth educational and occupational aspirations and expectations.

<sup>&</sup>lt;sup>2</sup>To calculate the magnitude of familial importance, significant others' influence has been divided into two categories.

In the present investigation, race and sex were controlled throughout analysis in order to assess the effects of selected predictors on occupational attainment for general populations of low-income youth, after accounting for race and sex effects. Family background factors were measured by educational levels of parents, occupations of parents, and mother's social participation. Significant others' influences in the family were measured by parenting practices (child's perception of parenting behaviors), mother's achievement orientations, child-rearing value orientation, mother's status projections for her child. Child and characteristics were measured by child's mental ability (I.Q.), self-concept and academic motivation. Influence of significant others outside the family was measured through influence of teachers, neighbors, reported friends. relatives, priests, and/or adult friends. Achievement motivation of the child was measured by the child's status projections expressed as educational and occupational aspirations and expectations, assessed at three periods of time (e.g., in 1969 when the youth were fifth and sixth grades; in 1975 juniors and seniors in high school; and in 1979, four years after high school). Educational attainment was measured at the end of period three (four years after high school). Occupational attainment was assessed at the same period, and converted to NORC scores (see p.56). The variables under consideration appear in Table 2.

Table 2. List of variables

X <sub>1</sub> : the the mot	Family background factor (FBK): A composite score of breadwinner's occupation educational levels of both mother and father ther's social "participation" scores Child's characteristics: A composite of	
- I Q SEL AC	(mental ability) _ (self-concept) (academic motivation)	
X <sub>3</sub> : 1) 2) 3) 4) 5)	Significant other's influence (parents):A composite ACV (mother's achievement orientation) CHA (character); Two factors of mother's OUT (outgoing) child-rearing value orientation MED (mother's ed. status projections for her child) MOC (Mother's occ. status projection for her child) LV (loving) DM (demanding) } Child's perception of parenting PU (punishing) practices PAR (parental influence on youth's future plans) SIB (siblings' influence on youth's future plans)	o f
X4: OU	Significant other's influence (extra-familiar people's influence on youth's future plans)	
X <sub>5</sub> : 1)	Achievement motivation as in educational and occupational aspirations and expectations of the yout Occ. aspirations in preadolescent years (1969) Occ. expectations in preadolescent years (1969) Ed. aspirations in preadolescent years (1969)	h
2)	Occ. aspirations in adolescent years (1909) Occ. expectations in adolescent years (1975) Ed. aspirations in adolescent years (1975) Ed. expectations in adolescent years (1975)	
3)	Occ. aspirations in post-adolescent years (1979) Occ. expectations in post-adolescent years (1979) Ed. aspirations in post-adolescent years (1979) Ed. expectations in post-adolescent years (1979)	
0 n e Tha 197	e variable from each period is used in the analysis. At is, Ed. Exp. of 1969, Ed. Exp. of 1975, Occ. Exp. 79. See page 83 for the reasons for the selection.	of
X <sub>6</sub> :	Educational attainment as of 1979	
X7:	Occupational attainment as of 1979	
		-

# Proposed Ecological/Path Model & Hypotheses <u>An Application of the Ecosystem Theory</u> <u>to Career Development of Adolescents</u>

As indicated in Chapter One, the study of youth career development has traditionally focused on the aspirations, expectations and motivation for educational and occupational attainment. and the general physical, familial environment behavioral and of the individual (primarily late adolescent years). The purpose of the present investigation is to present an ecological model for analysis of the career development of low-income youth. From such a perspective, youth are considered as a microunit of society, family as an environment and source of resources for all its members including the youth, and career development of the youth as one of the functions of the family.

### Ecological Systems Model

An ecological systems model is founded in ecology, the study of the interrelationships of organisms and environments. It is based on the concept of ecosystem, the interactional system of living things with the environment which surrounds them (Bubolz, Eicher, and Sontag, 1979). In the human ecosystem model, which is based on a general systems perspective, it is critical to realize that human beings interact with the total environment as is illustrated in Figure 5.



Figure 5. Conceptual Model of Family Ecosystem

Source Der of Family and Eurloy: Consys of Human Ecology. Michigan State University. Researce, Eurenson and Public Serves Aevee. 1975:1981. 1882. As presented in The Family of the Handicapped: An Ecological Model for Study and practice, by Bubolz and Mhiren (1984).

Interactions and transactions within the system are described by feedback processes between components of a system. A change in any part of the system affects the system as a whole as well as its subparts, creating the need for system-adaptation rather than the need to simply attend to a single part (Bubolz and Whiren, 1984).

In the human ecosystem model, it is assumed that humans are a part of the total life system and cannot be considered apart from all other living organisms in the environment. The environments for the family furnish the resources necessary for life and constitute the life support and social support systems (Andrew, Bubolz, and Paolucci, Family members transform energy, 1980). matter and information from their environment to meet their needs. The flow of energy and information into and through the system activates decision implementing processes (Bubolz and Whiren, 1984).

Like the family system, as illustrated in Figure 5, the individual in the ecosystem is regarded as a cybernetic input-output system. Information enters or re-enters through feedback, and provides perceptual data for the individual to examine his/her career choice behavior in relation to the environment. Individual development can be either facilitated or hindered, depending on the level of feedback employed. Based on the general systems concepts of "wholeness," it can be conceived that a change in any

segment of the family system, or environment will result in change in other segments.

In the application of this "Ecosystem Framework" to the study of career development of youth, the present investigator adapted the following concepts and assumptions used by Bubolz et al., (1979), Andrews et al., (1980), and Bubolz and Whiren (1984).

(a) Humans are a part of the total life system and cannot be considered apart from all other living species in nature and the environment that surrounds them. An individual youth in the family system is considered as a subsystem and is an actor as well as reactor, capable of interacting with the environmental input.

(b) The results of interactions are learned, experienced, and stored by the unit in its schema, and feedback -- either positively or negatively -- to the system.

(c) For an individual in the family, the family is an environment for him/her. The level of input of energy, information, goods and services input to the family system and the individual is related to the level of output by the family system and the individual organism.

(d) The boundaries of the family system vary in permeability, permitting energy and other exchanges with the environments, and with other systems in their environments to take place to varying degrees.

(e) Career development of youth is considered as one function of the family and as such it must be examined in its wholeness -- both spatial and temporal -- of interactions and interdependence.

Based on these assumptions, an ecological model of the career development of youth is proposed in Figure 6. This model presents the proposed relationships among the selected variables over a ten-year period. Spatial dimensions of the ecological contexts of career development of youth are represented by different layers of youth's environments. Temporal dimensions are represented by the time line covering the period from 1969 to 1979. The relationships illustrated in Figure 6 are assessed at three time periods: 1969, 1975 and 1979. Thus, it becomes possible to compare the effects of selected predictors at each time period, and to assess the developmental trends on a temporal dimension, both of which enables us to see how early the relationships are established and how changes are possible. This mode of analysis enables the researcher to differentiate those factors that influence career attainment of youth either independently or through status projections (i.e., educational and occupational expectations and aspirations).

Based on the proposed relationships among the selected variables, the specific hypotheses to be investigated were developed according to the research



Figure 6. An Ecological Model of Career Development of Youth

questions proposed at the beginning. Hypotheses 1 and 3 are related to the research question 2 (see p. 6-7). Hypotheses 2 is related to the question 3. Hypotheses 4 and 5 are related to the research question 1. Research questions 4 and 5 will be addressed in the final chapter. Five hypotheses are stated in the following section.

#### <u>Hypotheses</u>

The first hypothesis is directed at examining the relative importance of the selected independent variables on youth achievement motivation in the preadolescent years (1969), adolescent years (1975), and post-adolescent years (1979). This hypothesis is parallel to the research question 2. As a step toward assessing the overall explanatory power of the path model, hypothesis 1 measures the effect of early socialization experience on occupational achievement via achievement motivation variable. It is stated as:

> Hypothesis 1: Among low-income, southern, rural youth, the level of relationship between three independent variables (i.e., family background factors, child's characteristics, and significant others' influences) and the intervening variable of achievement motivation (i.e., youth educational and occupational expectations and aspirations) in the preadolescent years will be positively related to achievement motivation in the adolescent and postadolescent years.

The second hypothesis is intended to examine the developmental trend of youth achievement motivation (i.e., educational and occupational expectations and aspirations) at three successive age levels. This hypothesis is related to the research question 3. Two sub-hypotheses were developed:

Hypothesis  $2_1$ : Among low-income, southern, rural youth, the levels of aspiration and expectation in three successive age levels will demonstrate a negative (downward) trend over time.

Hypothesis 2<sub>2</sub>: Among low-income, southern rural youth, the differences between aspiration and expectation levels will increase over time.

The third hypothesis is to examine the effect of youth achievement motivation (i.e., educational and occupational expectations and aspirations) of preadolescent and adolescent periods on that of the post-adolescent and also the effect of the period. post-adolescent occupational expectations on the final educational and occupational attainment. Two sub-hypotheses were developed:

Hypothesis  $3_1$ : The level of achievement motivation in post-adolescence is positively related to the level of achievement motivation in the preadolescent and adolescent periods.

Hypothesis  $3_2$ : The level of achievement motivation in post-adolescence is positively related to the level of final educational and occupational attainment.

Hypothesis 4 is designed to assess both the direct and indirect effects of the selected independent variables (i.e., family background factors, child's characteristics, significant others' influence) on occupational attainment. Hypothesis 4: Among low-income, southern, rural youth, there is a positive relationship between the selected independent variables (i.e., family background, child's characteristics, and significant others' influence) and occupational attainment either directly or indirectly through such intervening variables as achievement motivation or the educational attainment.

The last hypothesis proposed examined the overall explanatory power of the path model for youth occupational attainment, integrating all the variables selected for the present study. It is stated as

> Hypothesis 5: Among low-income, southern, rural youth, the levels of influence of the selected independent variables (i.e., family background factors, child's characteristics, and significant others' influences) and the intervening variables (i.e., achievement motivation and educational attainment) are positively related to the level of occupational attainment.

Implications for family ecosystems theory are made from the findings of the study in the last chapter.

#### CHAPTER III

#### METHOD AND PROCEDURE

The primary foci of this investigation are to examine predictive factors and to formulate an ecological model of career development of youth over time. The original investigators used the status-attainment models for their study of low-income rural youth from six southern states. The following section provides a description of research design, sample procedures and methods of data collection as well that the original investigators used. as a description of operational and conceptual definitions that the present investigator has used. The discussion is followed by an overview of the data analysis strategy.

## Research Design & Subjects

This study is based on a secondary analysis of longitudinal data collected (and still is in the process of being collected) over a period of ten years. The original study--"Influence on Occupational Goals of Young People in the Three Southern Subcultures" -- was conducted under the title of the Regional Project S-63 (in 1969, phase 1), S-126 (in 1975, phase 2), and S-171 (in 1979, current phase). These were sponsored by the United States Department of Agricultural Cooperative State Research Service in six

southern states: Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia.

The population for the original study consists of low-income youth in three subcultures in the south. Samples were drawn purposively so that the county socioeconomic composition reflected areas characterized by unemployment, school dropout, and poverty. The sites of the twenty elementary schools comprising the initial sample were located in ten counties across six states. Areas were stratified to contain rural areas of 2,500 or less, and urban areas containing cities of 40,000 or more a s designated by the United States Census in 1960. In selecting counties, these criteria were used to delineate between four and ten schools in order to yield around 200 mother-child "pairs" in each state. Efforts were made to determine that each school site was homogeneous with respect to these selection criteria. Although no sampling frame with randomization was used, the original investigators estimate that the population of families in the south with similar characteristics totaled around 200,000 (Proctor, 1974).

In summary, the major purpose of the present study is to investigate the process of youth career development. The original model is one of status attainment of low-income rural youth from six southern states. The present study uses an ecological model. The study is longitudinal in design involving three phases of assessment: 1969, 1975, and 1979. A regional research committee made up of members from six southeastern states carried out the original study. The unit of analysis is 544 individuals (out of the original 1412 mother-child pairs) who were followed up over time<sup>1</sup> and from whom completed questionnaires were available for all three assessment periods.<sup>2</sup>

## Procedures for Data Collection

The initial questionnaire used in 1969 was pretested by the participating states between January and July of 1968. The original version of the youth questionnaire was revised by the regional subcommittee of the project and the instrument contained 116 items, in final addition to information on demographic characteristics. Interviewers were given a manual of instructions to read in preparation for the interviewing process and introducing themselves to the student subjects. Training sessions were then held with the interviewers to explain and clarify the purpose and procedures to be administration used in the study. Prompters and instructions were included for each section of the instrument to guide the students in completing the

<sup>&</sup>lt;sup>1</sup>For follow-up procedure of the original study, refer to Appendix E.

<sup>&</sup>lt;sup>2</sup>Black males totaled 91, black females 97, white males 150, and white females 206.

questionnaire. Interviews in all seven states followed the same procedures.

In 1969, the questionnaires were administered to all students in the classroom by a two-person team (project researchers). One team member read the instructions, while the other assisted the students by answering individual questions and acting as a monitor to ensure that procedures were followed correctly. After the initial administration. students not meeting the criteria of being representative of a low-income subculture and those below average I.Q.'s were dropped from the sample.<sup>1</sup> In 1975, similar procedures for administering the questionnaire were used with the 1969 sample. Additional instructions were given on how to follow up those students who were no longer in school or had left the community. The 1979 follow-up involved mailing the respondents. A discussion questionnaires to of respondent follow-up procedure is available in the Appendix Ε.

Each state participating in the project was responsible for coding returned questionnaires in the 1979 follow-up. Responses were coded on to a prepared coding

<sup>&</sup>lt;sup>1</sup>The few children whose parents were professionals or otherwise of high status were later eliminated, leaving a homogeneously low-income sample. "Special" classrooms, such as those made up of fast or slow learners, were not included. Children scoring below 60 on the Otis Lennon mental ability test administered, and other children believed by their teachers to be unable to read and understand the questions, were also removed from the sample.

sheet from which computer cards were keypunched. The coding of occupational aspirations and expectations was completed at the University of North Carolina at Greensboro for all the states in order to ensure uniformity of codes. Items reflecting important life events were coded at the University of Kentucky. Computer cards were then sent to North Carolina State University for transfer to data tapes.

#### Conceptual & Operational Definitions of Variables

The primary dependent variable in the present study is the occupational attainment reported by the youth in Conceptually, occupational attainment is defined as 1979. the level of prestige attached to the occupation in which a person is engaged at a specified time in their life. Respondents were asked the following questions: "Now, what have been your job experiences? Please give the name of the job or type of work you had during each of the following years." (Refer to Appendix D, item 8). The responses were then coded using a NORC (National Opinion Research Center) classification structure developed by North and Hatt (Reiss, The NORC classification scheme was derived as a 1961). prestige continuum of occupations. Ten major categories of occupations were listed with job choices being representative of each category. Status scores, using the NORC scale, ranged from 93-34.

The six categories of independent variables (refer to Table 2) that were used in the analysis are family background factors  $(X_1)$ , child's characteristics  $(X_2)$ , parenting factors  $(X_3)$ , significant others' influence  $(X_4$ -outside family members), youth achievement motivation  $(X_5)$ , and educational attainment as of 1979  $(X_6)$ . Since not all the variables were present for each year, refer to Appendix A for the year that the specific variables are collected. The above variables will be defined in order:

Family Background Factors: This is a composite (1) status score based on the breadwinner's socioeconomic occupation (if not father, mother), the level of schooling of both mother and father, and a six-item measure of social participation (e.g., voter registration and voting behavior, church attendance, memberships in organizations, frequency of watching television (news), and reading the newspaper). (Refer to Appendix C, items 7-15, 30, 31, and 36.) Family background factors were assessed in 1969. Education is coded into years of schooling, occupation to NORC score, and mother's "social participation" as a combination of scores. All of these scores are compiled as one score by the original investigators.

(2) <u>Significant Others' Influence in the Family:</u> Conceptually, significant others are defined as individuals such as parents, friends, teachers, and/or relatives who have a profound influence on youth's career choice

decisions. Essentially, this category reflects the influence of family members. It includes an indicator of whom the youth has talked to regarding future plans as well parenting variables. Respondents checked on the as questionnaire whom they talked with about future plans and indicated one person whose advice is more important to them to their future plans. (Refer to Appendix B, items 11 and 12.)

Parenting practices are measured in four areas: (a) Mother's status projections for their children, (b) Mother's achievement orientations, (c) Child-rearing values, and (d) Maternal child-rearing practices. The above variables are defined in order.

(a) Mothers' status projections for their children: Conceptually, status projections refer to the mothers' aspiration levels for their children's future educational occupational attainment. Maternal educational and expectations for the respondent were obtained in 1969 (when the children were fifth and six grades) via "How far do you think (<u>name</u>) really will go in school?" and coded into one of seven categories (refer to Appendix C, item 6). Maternal occupational expectations for the child were similarly asked, "What kind of job do you think (<u>name</u>) really will have when he grows up?" It is coded into NORC scores (refer to Appendix C, item 3).

(b) <u>Mothers' Achievement Orientations</u>: Conceptually, achievement orientations refer to the attitude of the mothers' toward success and goal attainment in their own lives and were assessed with Rosen's six "achievement value" orientation scale (refer to Appendix C, items 17, 19, 21, 23, 25 and 27).

Child-rearing values: Conceptually, child-(c) rearing values refer to the characteristics or qualities that parents foster in their children while raising them. They were measured by Kohn's sixteen-item factor scale designed to determine the personality characteristics of the child that the mother values most highly. This is known as Kohn's Parental Value Scale. Each mother was asked to select the three characteristics which were most important for a child for her child's age. Factor scores were assigned to each mother's set of responses by the original investigators. positive scale score indicates Α а preference for "self-direction" while a negative score suggests a desired orientation of "behavior conformity" in children her child's age. (Refer to appendix C, item 29).

(d) <u>Maternal child-rearing practices</u>: Conceptually, child-rearing practices refer to parental behaviors perceived by the children as an expression of specific parenting values and characteristics. They were measured as factor scores on three multiple-item scales: Loving, Punishing, and Demanding from Bronfenbrenner's parental behavioral questionnaire. The child is asked about maternal child-rearing practices in terms of how he/she perceives his/her mother interacting with him/her in a variety of childrearing situations (refer to Appendix B, items 50-94). The sum of scores for each factor of Loving, Punishing, and Demanding was adjusted by the original investigators so the high score means, respectively, high loving, high punishing, and high demanding behaviors of the mother.

(3) <u>Child Characteristics</u>: Included in this category are the following variables.

(a) <u>Mental ability (I.Q.)</u>: It was assessed in 1969 by the child's score on the Otis-Lennon mental ability test, a group-administered mental ability measurement. Otis and Lennon (1969) reported validity coefficients in the range of .60 - .80 by testing it against other mental ability measures.

(b) <u>Self-concept</u>: Conceptually, self-concept refers to the individual youth's conception of himself/herself, including values, abilities, goals, and personal worth. It was assessed by the youth's response to a scale developed by Lipsit (1958). The scale was used in 1969 and consisted of 22 descriptive words which the children checked according to how well they believed it described the way they felt about themselves (refer to Appendix B, items 95-116). In 1975, a measure of self-concept was not administered. But in 1979,
a seven-item measure of self-concept was employed, which was not used in the present study.

Academic motivation: Conceptually, academic (c) motivation refers to the youth's attitude toward school performance and achievement. It includes "liking" school and is included in the 1969 and 1975 models. In this study, only 1969 measure was used. It was assessed by six item from Elder's (1962) scale, and four items from Weiner's Achievement Motivation scale. Elder's scale included such items as "I am interested in my school work," and "I really try to get good grades." It consists of six items and the respondent's choice of answer was a five-response schema ranging from always to never (refer to Appendix B, items 19-24). Weiner's scale consisted of four items, and included such items as "When I am sick, I would rather..." or "After summer vacation I am ... " The respondent's choice of answer was selected from a two-response category that represent either low or high motivation of the respondents (refer to Appendix B, items 31, 32, 37, and 40). The score for each item was combined and adjusted by the original investigators so the high score means high academic motivation.

(4) <u>Significant Others' Influence (Extra Familial)</u>: It is an indicator of whom the youth has talked to regarding future plans. If respondents checked on the questionnaire persons other than his/her family members, such as teachers, friends, neighbors, relatives, priests, etc., as persons whom they talked with about future plans, it constitutes as responses fitting to this category (refer to Appendix B, items 11 and 12).

(5) <u>Achievement Motivation</u>: Conceptually, it refers to youth's motive to attain some standard of accomplishment in their educational and occupational career. It was measured by the following variables.

(a) <u>Educational aspirations and expectations</u>: These variables were assessed in 1969, 1975, and 1979. A distinction is made between aspirations and expectations. Aspirations refer to what one would like to achieve, while expectations refer to what one really thinks one is going to achieve.

In 1969 and 1975, the youth were asked "If you had your choice, how far would you like to go in school?" and "How far do you think you really will go in school?" to measure aspirations and expectations, respectively (refer to Appendix B, items 13 and 14). In 1979, the youth were asked "Looking into the future, which of the following statements best describe how much additional education and training you would really like to have?" and "... how much additional education and training you think you really will get?" (refer to Appendix D, items 35 and 36).

The respondent checked 1 of 8 choices ranging from trade or vocational/technical school to desiring no further

education. In each year, the responses for educational aspirations and expectations were treated separately.

(b) Occupational aspirations and expectations: These were operationalized parallel to the level of educational aspiration and expectation variables in each year. The actual item is in 1969, 1975 and 1979, "If you could choose any job you wanted, what kind of job would you really like to have in the future?" and "What kind of job do you think you really will have in the future?" (refer to Appendix B, items 9 and 10, and Appendix D, items 33 and 34). Both occupational "aspirations" and "expectations" components are NORC in scores. In each year, the responses for occupational aspirations and expectations were treated separately.

Educational Attainment: (6) Conceptually, educational attainment refers to the level of education an individual obtains at a certain point in their life (e.g., in this study, as is assessed as of 1979, or four years after high school). Respondents were asked in 1979, "How far have you gone in school?" Respondents were asked to check one of the ten response categories (refer to Appendix D, item 16). The responses were then converted to the scale that corresponds the for educational to responses aspirations and expectations.

### Overview of Analyses

Stage one of the data analysis involved descriptive statistics which describe the characteristics of the sample, the way the sample responded on the major variables, distributions, intercorrelations of a]] the response independent and dependent variables, and in some instances, of bivariate relations. Zero-order scattergrams correlations, means, and standard deviations of variables appear in Appendix F, Table 1.

Descriptive linear analysis is inadequate for explaining the influence of ecological factors over time. Therefore, in order to better understand complex phenomena such as predictive factors of career development process, it was necessary to use multivariate regression models rather than the linear, bivariate models that are most commonly used. Thus, stage two of the analysis used the multiple regression technique to assess the overall explanatory power of the conceptual model of youth occupational attainment. This kind of analysis is more appropriate in situations where more than one independent variable influences the dependent variable. It provides a hierarchical order of the variables which information about have the most influence in predicting successful career attainment.

In stage three of the analyses, a path analysis model was used, depending on strength of relationships found among the variables tested. It was used to determine the relative

importance of the selected independent variables over time. Path analysis is a method of decomposing and interpreting linear relationships among a set of variables by assuming that a prior causal ordering is known among the variables. Based on the literature review. and on the time the variables were collected by the original investigators (i.e., 1969, 1975, and 1979), it was assumed that the ordering of the selected independent variables in the study was known. This was an initial step toward causal modeling. The path analysis itself does not indicate the causal order The researcher does that. The special of the variables. strength of the path model is in the graphic portrayal of the results.

In addition, trend analysis was applied to analyze the for educational trend vouth and occupational expectations and aspirations at the three periods: preadolescent, adolescent, and post-adolescent periods (to test for hypothesis 2). To further analyze the trend, after variables, accounting for race and sex Multiple Analysis Classification (MCA) was used. It is more appropriate than linear regression because several of the predictors are not linear in their effects. The key feature of Multiple Classification Analysis is that it can show the effects of any predictor, both before and after taking into account the effects of all other predictors (to test for hypothesis 3). This analysis provides an "adjusted mean"

for each category of the predictors tested (Nie et al., 1975).

The basic path model is diagrammed in Figure 7. A11 analyses were carried out using the Statistical Package for the Social Science (SPSS) computer program (Nie et al., The basic model that was analyzed is a recursive 1975). model in which the variables that were incorporated have a fairly clear causal ordering in the literature. The path model examined in this study included one exogenous variable<sup>1</sup>: the family background factor which is a composite score of the breadwinner's occupation, father and mother's educational level, and mother's social "participation."

The following equations were used to estimate the direct effects on each dependent variable: (Refer to Table 1 on page 24 for variable names of  $X_1 - X_7$ .)

 $X_{2} = P_{21}X_{1} + P_{23}X_{3} + Race + Sex + e$   $X_{3} = P_{31}X_{1} + P_{34}X_{4} + Race + Sex + e$   $X_{4} = P_{41}X_{1} + Race + Sex + e$   $X_{5} = P_{51}X_{1} + P_{52}X_{2} + P_{53}X_{3} + P_{54}X_{4} + Race + Sex + e$   $X_{6} = P_{61}X_{1} + P_{62}X_{2} + P_{63}X_{3} + P_{64}X_{4} + P_{65}X_{5}$  + Race + Sex + e

 $<sup>^{1}</sup>$ An exogenous variable is a variable whose variability is assumed to be determined by causes outside the causal model (Nie et al., 1975).

$$X_7 = P_{71}X_1 + P_{72}X_2 + P_{73}X_3 + P_{74}X_4 + P_{75}X_5 + P_{76}X_6$$
  
+ Race + Sex + e

The analysis of each of the six equations involved a hierarchical exclusion method of multiple regression. The variables are examined against the dependent variable based on temporal priority as illustrated in Figure 7. Race and sex were controlled in all equations. Only those samples that have the data for all three periods were analyzed. The number totaled 544: 241 males, 303 females, 188 blacks, and 356 whites.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup>Black males totaled 91, black females 97, white males 150, and white females 206.





#### CHAPTER IV

### ANALYSIS AND FINDINGS

The first section of this chapter examines the statistical assumptions necessary for regression and subsequent path analysis; and the next section focuses on an examination of the hypotheses. Following the discussion of the hypotheses, a brief discussion of the impact of the studied predictors on youth career development is presented.

Statistical Assumptions for Path Analysis

Like all statistical analysis techniques, multiple regression and path analysis have a set of assumptions that necessarily must be met if it is to be considered "robust." Nie and his associates (1975) list the following basic statistical assumptions for regression and subsequent path analysis: (a) that the sample is randomly drawn; (b) that the dependent variable is normally distributed at even points along the independent variable; (c) that the regression is linear; and (d) that there is homogeneity of variance among the dependent variable scores at each point on the independent variable.

Since the sample was drawn by a purposive stratified design, the use of regression, path analysis and significance tests based on assumptions of simple random

sampling could be questioned. However, Proctor (1974), the project statistician of the original investigation, explains that the purposive sampling method was justified considering the objective for the original wave of data collection which was to compare the goals of low-income youth from three subcultures ("rural Negro," "urban Negro," and "rural White Appalachian)<sup>1</sup> in the South, since "a stratified sample design usually leads to greater internal diversity than a simple random sample (p.61)."

Proctor (1974) further elaborates in reference to the initial sampling strategy that the "levels of significance computed using conventional regression theory assumptions will be taken as correct." The ability to use analytic procedures in order to ascertain causal linkage between variables is predicted based on the fact that the scale of

According to the original investigators, the achievement literature has focused on values, child-rearing practices, and the child's self-concept as important variables. Since these are culturally based and since there is evidence of subcultural differences in them as between social classes, race, ethnic groups, and people living in rural and in urban areas, it was thought appropriate to conceive of several "low-income subcultures" from which the sample would be drawn, namely "rural Negro" "urban Negro" and "rural White Appalachian." These "subcultures," according to the original investigators, were the principal large "poverty groups" in the states involved. It was realized that they only partly met the criteria of a subculture, but it seemed desirable to select samples that would be as homogeneous as possible, economically and culturally, so that the relationship of other variables to achievement motivation within each group could be assessed (Coleman, 1974).

measurement of the dependent variable is at least on an interval level. In the present study, this was the case.

The occupational score was developed as a prestige or status continuum (Reiss, 1961). The NORC Scale for occupations places the prestige scores on a partially ordered scale which is designed to reflect a social-status continuum. (For a discussion of the representativeness of the NORC occupations see Reiss, 1961.) In general, the construction of the scale may be taken to reflect a continuum of occupational prestige.

#### Examination of Hypotheses

The five that hypotheses were presented for investigation at the end of Chapter three were tested through the use of path analytic procedures. The analyses provided information on the model's ability to explain the occupational attainment process of youth, as well as the magnitude of importance of the predictors on youth career development over time. The specific hypotheses are presented in the following section.

# <u>Hypothesis 1</u>: The effects of early socialization experience on youth achievement motivation

first hypothesis The deals with the relative importance of the selected independent variables (i.e., family background factors, child's characteristics, significant others' influence) on youth Achievement motivation levels in the preadolescent years (1969).

adolescent years (1975), and post-adolescent years (1979). It was stated, as follows:

H1 Among low-income, southern, rural youth, the level of relationship between three independent variables (i.e., family background factors, child characteristics, and significant others'influences) and the intervening variable of achievement motivation (i.e., educational and occupational aspirations and expections) in the preadolescent years will be positively related to those of adolescent and post-adolescent years.

As shown in Table 3, the total variability of youth occupational aspirations and expectations explained by three groups of independent variables was the greatest in the adolescent years  $(R^2 = .16)$ , followed by those of postadolescent periods  $(R^2 = .12)$  and pre-adolescent periods  $(R^2 = .096)$ . Table 4 shows the total variability of youth educational aspirations and expectations explained by the independent variables. It reveals that in the same preadolescent years the selected independent variables accounted for 20 percent of the variability in educational aspirations and expectations, as compared to 26 percent of variance accounted for in the adolescent years. The same independent variables that explained 20 percent and 26 percent of 1969 and 1975 variances, respectively, were

Trdenendent Variahles	Pread	olescent J	supational Couth	Aspira	tions and I scent Youth	<u>Expectations</u>	Posta	dolescent 1	louth
	R <sup>2</sup>	R <sup>2</sup> change	Beta	R <sup>2</sup>	R <sup>2</sup> change	Beta	R <sup>2</sup>	R <sup>2</sup> change	Beta
kace	.027	.027	19 <sup>*</sup>	.014	.014	13*	.012	.012	<b>-</b> .12 <sup>*</sup>
Sex	.063	.036	.16*	.094	.080	.28 <sup>*</sup>	.032	.120	*गः
Family Background	.077	.014	(su) 60.	011.	.016	(ਗ) ਈ.	.077	.045	<b>.</b> 19 <sup>*</sup>
Child's Charact- istics	.096	610.	(su) <b>č</b> I.	.140	.030	.24*	.088	110.	.11*
Significant Other's Influence Inside Family	.0961	1000.	02 (ns)	.150	.010	(an)01.	111.	.023	.11*
Outside Family	.0962	.00008	(su) 20.	.157	.007	(su) 80	.116	.005	(su) (0
* &<.05									
NS - not significant									
Preadolescent Youth:	Overall	F (6, 21	7) = 3.82 <sup>*</sup>	° A	.) 960. =	07, Adjusted			
Adolescent Youth:	Overall	. F (6, 21	7) = 6.69 <sup>*</sup>	°×.	<sup>2</sup> = .16 <sup>(</sup> .1	3, Adjusted)			
Post-Adolescent Your	n:Overall	. F (6, 21	7) = 4.71 <sup>*</sup>	ъж	2 <b>-</b> .12 (.0	9, Adjusted)			

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		囹	ucational	Aspir	ations and	l Expectatio	su		
Independent Variables	Pre-/	Adolescent Y	outh	Adole	scent Yout	4	Post-	Adolecrant	۲۷ ط
	R <sup>2</sup>	R <sup>2</sup> change	Beta	R <sup>2</sup>	R <sup>2</sup> change	 Beta	200 CZ	R <sup>2</sup> chance	Beta
Race	038	038	*	800		*			2214
			t. •	550.	<b>0</b> 50.	25	.011	110.	(su)260
Sex	.045	.007	.24*	.0383	.0003	<b>-</b> .09	.017	.006	056(ns)
Family Background	.100	.055	(su)60.	.0963	.058	.18*	026	600	()
Child's Character-			-)						(ختا)ه/٥
SJUST	.193	.093	.19 <sup>°</sup>	.174	.078	.30*	.032	.006	084(ns)
Significant Other's Influence									Ì
Inside Family	.201	600.	(su)/0.	.236	.062	.16*	03201		
Outside Family	.203	.002	(su)()	.264	.028	- 16 *	03/.		(ai)+00.
						24.	••••	700.	(su)c60
* A < .05									

Table 4. Summary Table Comparing the Path Variables for the Sample of Preadolescent, Adolescent, Post-adolescent Youth (Edicational Asoirations and Expertations)

NS - not significant

R<sup>2</sup> = .20 (.18, Adjusted) R<sup>2</sup> = .26 (.24, Adjusted) R<sup>2</sup> = .03 (.006, Adjusted) Preadolescent Youth: Overall F (6, 217) = 9.29\*
Adolescent Youth: Overall F (6, 217) = 12.98\*
Post-Adolescent Youth: Overall F (6, 217) = 1.24 (ns)

unable to show any statistically significant associations with 1979 educational aspirations and expectations ( $R^2 = .03$ , N.S.)

Based on the results reported in Tables 3 and 4, Hypothesis 1 was partially supported. That is, the level of associations between the selected independent variables and occupational expectations and aspirations in the preadolescent periods is positively related to those of the adolescent and post-adolescent periods, but the degree of relationship is stronger in the adolescent period than in the post-adolescent period. This relationship does not hold for educational expectations and aspirations.

# <u>Hypothesis 2</u>: Developmental trend for achievement motivation

Hypothesis 2 examined the developmental trend of achievement motivation (i.e., educational and occupational aspirations and expectations) at three successive age levels. The mean differences and correlations between aspirations and expectations have been calculated to assess the developmental trend of youth aspirations and expectations separately. Two sub-hypotheses were stated, as follows:

H21 Among southern, low-income, rural youth, the levels of aspiration and expectation in three successive age levels demonstrate a negative (downward) trend over time. H2<sub>2</sub> Among low-income, southern, rural youth, the differences between aspiration and expectation levels will increase over time.

As shown in Tables 5 and 6, and in Figures 8 and 9, Hypotheses  $2_1$  and  $2_2$  are supported. With regard to  $H2_1$ , Table 5 and Figure 8 show that occupational expectations showed a significant downward trend  $[t_{\Theta_1} = -4.19 < -2.4 =$ Scheffe<sub>cy</sub>  $(2, \infty)$ ]. Youth aspiration level did not show any significant trend over time. This result can be interpreted as showing that the youth do not lower their occupational aspiration levels over time as they move from the preadolescent period to the post-adolescent period. However, they adjust (lower) their expectation levels as older, perhaps because they realize the they grow limitations either in their ability or in their environment, while still maintaining the high aspiration levels set in their elementary school years.

Table 6 and Figure 9 show the developmental trend of educational aspirations and expectations. The level of educational aspirations indicates a negative linear trend over time  $[t\hat{\psi}_L = -13.67 < -2.4 = \text{Scheffe}_{CV} (2, \infty)]$  as well as a negative quadratic trend  $[t\hat{\psi}_Q = -5.395 < -2.4 = \text{Scheffe}_{CV} (2, \infty)]$ . This means that the level of youth educational aspirations decreases over time as they move from pre-adolescent through adolescent to the post-

Table 5. Coc Occ Pro	Su prelat cupati eadole	ummary <sup>-</sup> cion Co ional escent, /	Table effici Asp./ Adoles	Showin ients, Exp. cent, a	ig t and for ιnd Ρ	he Mear Trend the ost-Adol	n Dif analy Samp escen	ference, /sis of le of t Youth
	a c A	Pre- lolescent lsp./Exp.	A	.dolesce Asp./Ex	ent (p.	Post adolesc Asp./E	ent xp.	Overall
NORC Mean Score		70.35/ 67.70		69.55/ 64.12	,	69.75 63.99	5/ 17	182.56/ 163.29
Mean Differend	es	2.65		5.43		5.75	j	19.29
Coorelatio	n	.602		.503		. 591		.786
T-value		6.42		11.79		10.09	1	14.10
df		523		465		346	,	543
Significar (two-tail	)	.0001		.0001		.0001		.0001
Trend Ana	ysis	(Linea to 1979	r and	Quadra	tic t	trend fr	om 196	
Occupati tγ̃L =	onal -1.52 is no	Aspirati > -2.4 signifi	ons: = Sch cant	effe <sub>cv</sub> ( linear	2,∞ rela	) at ≪= tionship	.05 over	(There time.)
Occupati t <mark>φ<sub>L</sub> =</mark>	onal -4.19 is a time.	Expectat < -2.4 signific )	cions: = Sch cant n	effe <sub>çv</sub> ( egative	2,∞ ) lini	) at ≪= ear rela	.05 ( tionsh	There There



Figure 8. Developmental Trend for Occupational Aspirations and Expectations

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Aspirations Expectations adolescent periods. Furthermore, the rate of decline is more rapid as they grow older.

The level of youth educational expectations demonstrates a negative linear trend over time  $[t\hat{\varphi}] = -140.2$ < -2.4 = Scheffe<sub>cv</sub>  $(2, \infty)$ ]. However, the rate of decline is more pronounced from pre-adolescence to adolescence than from adolescence to post-adolescence. In other words, the results reported in Tables 5 and 6, and in Figures 8 and 9 all confirm the negative linear trend over time in youth achievement motivation levels, except occupational aspirations. This means that low-income, rural youth lower their occupational expectations (not aspirations) and educational aspirations and expectations, as they grow older (for reasons not explored in the present study), but maintain the high occupational aspirations they had in preadolescent years.

With regard to  $H2_2$ , the results reported in Tables 5 and 6, and in Figures 8 and 9 all confirm that there is a significant difference between youth aspiration and expectation levels, in terms of both occupation and education. Also the gap between aspirations and expectations increases over time: that is from 2.65 differences in NORC score in the preadolescent period to 5.43 in the adolescent period, to 5.75 in the postadolescent period. Tables 5 and 6 also indicate that aspirations and expectations are highly correlated (r = .786

	Pre- adolescent Asp./Exp.	Adolescent Asp./Exp.	Post- adolescent Asp./Exp.	Overall
Mean Score (1-7)*	5.93/ 5.42	5.58/ 4.63	4.60/ 4.09	14.16/ 12.63
Mean Differences	.5095	.9506	.507	1.489
Coorelation	.607	.641	.506	.731
T-value	8.59	13.77	7.72	13.08
df	523	465	427	543
Significance (two-tail)	.0001	.0001	.0001	.0001
*Refer to App	pendix B, ite	ms 13 and 14.		
Trend Analys	<u>is</u> (Linear a to 1979)	and Quadratic	trend from 19	969, 1975
Ed. Aspirat	tions: A Nega	tive linear t	rend as well	as a
t <mark>φ<sub>L</sub> =</mark> -13 tφ <b>Q =</b> -3	3.67 < -2.4 = 3.74 < -2.4 =	Scheffe <sub>cv</sub> (2, Scheffe <sub>cv</sub> (2,	$\infty$ ) at $\alpha = .05$ $\infty$ ) at $\alpha = .05$	5
Ed. Expecta	ations: A Neg	ative linear t	rend and	

Table 6. Summary Table Showing the Mean Difference, Coorelation Coefficients, and Trend analysis of Educational Asp./Exp. for the Sample of Preadolescent, Adolescent, and Post-Adolescent Youth

a Positive quadratic trend  $t\hat{\psi}_L = -140.2 < -2.4 = \text{Scheffe}_{\text{cv}}(2,\infty) \text{ at } \alpha = .05$   $t\hat{\varphi}_Q = 5.94 > 2.4 = \text{Scheffe}_{\text{cv}}(2,\infty) \text{ at } \alpha = .05$ 



Figure 9. Developmental Trend for Educational Aspirations and Expectations

between occupational aspirations and expectations: r = .731between educational aspirations and expectations).

In summary, the findings from hypotheses  $2_1$  and  $2_2$  indicate that although youth aspiration and expectation levels are highly correlated, the youth show significant differences in their aspiration and actual expectation levels, and the differences increase as they grow older.

# <u>Hypothesis 3;</u> Achievement motivation, and educational and occupational attainment

examined the relationship Hypothesis 3 between earlier levels of achievement motivation (i.e., educational and occupational aspirations and expectations of preadolescence and adolescence) and achievement motivation in the post-adolescent years. It also examined the effect of youth post-adolescent achievement motivation (but in this case, only occupational expectations were used. Footnote 1 on page 83 explains the reasons for selecting this variable) on the final educational and occupational attainment. Two sub-hypotheses were stated, as follows:

- H31 The level of achievement motivation in postadolescence is positively related to achievement motivation in the preadolescent and adolescent periods.
- H32 The level of achievement motivation in postadolescence is positively related to the level of final educational and occupational attainment.

Multiple Classification Analysis (MCA) was applied to assess the effect of the previous achievement motivation (i.e., in the preadolescent and adolescent periods) on the final achievement motivation levels (i.e., in the postadolescent period), after controlling for race and sex. Hypothesis  $3_1$  is partially supported based on the findings reported in Tables 7 and 8. That is, only occupational (but not educational) expectations in post-adolescent period are positively related to youth educational expectations stated by the youth in their preadolescent and adolescent years.<sup>1</sup>

Table 7 shows the effect of preadolescent and adolescent educational expectations on post-adolescent

 $<sup>^{1}</sup>$ A word of caution should be exercised, however, in order to interpret the findings and make this statement. This is because there was found to be a specific variable at each time period (i.e., 1969, 1975, and 1979) that has more predictive power than other variables to account for the variability of educational and occupational outcomes. For example, as shown in Table 2 in Appendix F, vouth educational attainment (measured in 1979) is most highly correlated with the adolescent educational expectations (r =.63), whereas youth occupational attainment is most highly correlated with the post-adolescent occupational expectations (r = .59).

It can be interpreted as an indication that the youth educational goal in high school years has the strongest predictive power for actual educational attainment, whereas youth occupational attainment is best predicted by postadolescent occupational expectation. (See also the discussion under Hypothesis  $3_2$ .)

After consulting Table 2 in Appendix F, educational aspiration variable is selected from four variable in 1969 educational and occupational aspirations and expectations as the one that is most highly related to the attainment variable. The same procedure is executed in each of the remaining periods to select the one that is most highly correlated to the final outcome variable.

Source of variation	Sum of squares	Df	Mean square	F
Covariates	1355.55	2	677.77	
Race	1349.54	-	1349.54	10.37*
Sex	9.51	1	9.51	. 0 7 ( n s )
Main Effects	5397.07	2	2698.53	20.74*
Ed. exp. '69	810.32	1	810.32	6.23**
Ed. exp. '75	3733.75	1	3733.75	28.7*
2-Way Interactions	19.78	1	19.78	.15
Ed. exp. '69 and Ed. exp. '75	19.78	1	19.78	(ns) .15
Explained	6772.39	5	1354.48	10.41*
Residual	34863.87	268	130.09	
Total	41636.26	273	152.51	

Table 7.	The effect o	of 1969	and 1975	educational	
	expectations	on 197	9 occupat	ional expectati	ons

\* & <.001

\*\* 🗹 < .01

ns -- not significant

occupational expectations. The MCA technique was applied to control for the effects of race and sex. Based on the results reported in Table 7, a significant effect was found adolescent preadolescent and educational for both aspirations on post-adolescent occupational expectations, even after the effects of race and sex were controlled. In addition, race was found to have a significant influence on the level of youth occupational expectation, while sex was Table 7 also indicates no interaction effect between not. educational expectations and preadolescent adolescent educational expectations. This may be interpreted as indicating that educational expectations at each period have а separate influence on post-adolescent occupational expectations.

Table 8 shows the effect of youth educational expectations in the preadolescent and post-adolescent years on the post-adolescent educational expectations. Again, MCA technique was applied. There appears to be an effect of preadolescent and adolescent educational expectations on the level of the post-adolescent educational expectations; however, when the effect of race is controlled, there is no significant effect of the two variables left on the postadolescent educational expectations. Therefore, it is concluded that this effect is caused by the race variable rather than the two independent variables.

Source of variation	Sum of squares	Df	Mean square	F
Covariates	9.89	2	4.95	3.38**
Race	8.69	1	8.69	5.93*
Sex	.86	1	.86	.59 (ns)
Main Effects	3.83	2	1.92	1.31
Ed. exp. '69	. 5 9	1	. 59	.40
Ed. exp. '75	3.54	1	3.54	(ns) 2.41 (ns)
2-Way Interactions	1.89	1	1.89	1.29
Ed. exp. '69 and Ed. exp. '75	1.89	1	1.89	1.29
Explained	15.62	5	3.12	2.13*
Residual	462.86	316	1.47	
Total	478.48	321	1.49	

Table 8. The effect of 1969, and 1975 educational expectations on 1979 educational expectations

\* & <.01 \*\* & <.06

ns -- not significant

Hypothesis  $3_2$  is supported based on the findings reported in Table 9. That is, occupational and educational expectations in post-adolescence are positively related to the final educational and occupational attainment. Table 9 shows the multiple regression results in which educational and occupational attainment are analyzed in relation to achievement motivation. The strongest predictor for educational attainment is adolescent educational expectations, whereas the strongest predictor for occupational attainment is post-adolescent occupational expectations. (See also the discussion under Footnote 1 on page 83.)

Table 9. Regression Results of Youth Achievement Motivation on Educational & Occupational attainment

				Educ Atta	ation	al t	00 /	cupat ttain	ional ment	
			r	 R <sup>2</sup> c	R2 Range	Beta	r	R2	R2 change	- Beta
Ed.	Exp.	69	.19				.12			-
Ed.	Exp.	75	.63	.23	.23	.53*	. 23	-	-	-
0cc	Exp.	79	.48	.43	.21	.33*	.59	.26	.26	.51*

\* & < .05

<u>Hypothesis 4</u>: A path modeling

Hypothesis 4 examined both the direct and indirect effects of the selected independent variables (i.e., family background factors, child's characteristics, significant others' influences) on youth occupational attainment. Direct effects are assessed through multiple regression analysis. Indirect effects of these independent variables on youth occupational attainment are assessed through a path analysis technique, using intervening variables such as youth achievement motivation and educational attainment as linkages to the final outcome. Hypothesis 4 was stated, as follows:

H<sub>4</sub> Among low-income, southern, rural youth, there is a positive relationship between the selected independent variables (i.e., family background factors, child characteristics, and significant others' influences) and occupational attainment either directly or indirectly through such intervening variables as the achievement motivation or the educational attainment.

As shown in Tables 10 and 11, hypothesis 4 is supported, but only indirect relationships are confirmed. It was found that there is no direct association between the selected independent variables tested and the final occupational attainment. The associations are mediated

		Direct Eff	ect
	C	)ccupational At	tainment
Independent Variables	R2	R <sup>2</sup> Change	Standardized Beta
Race		.000	.02 (ns)
Sex	.034	.034	.19*
Family Background	.037	.003	.06 (ns)
Child Charactersitics	.037	.000	04 (ns)
Significant Other's Influence Inside the Family	.040	.003	.04 (ns)
Outside the Family	.041	.001	.07 (ns)
Achievement Motivation	.381	.34	.53* (.53) <sup>1</sup>
Educational Attaionment	.385	.004	.07* (.09) <sup>1</sup>

# Table 10. Direct Effects of the Selected Independent Variables on Occupational Attainment

Overall F (8, 269) = 21.00\* R<sup>2</sup> = .38 (Adjusted R<sup>2</sup> = .37)

\* ~ < .05

ns - not significant

<sup>1</sup>The path coefficients in parentheses indicate the path coefficients after removing the non-significant vairables from the regression equation. These values are reflected in the path diagram in Fig. 10. The overall F (3, 273) = 41.65 for the final regression equation R<sup>2</sup> = .38 (.37, adjusted).

	<b>r</b> 2	Achieveme R <sup>2</sup> Change	<u>nc Motivation</u> Unstandardized Beca	direct Effect Thr Standardized <b>Beta</b>	22	Education #2 Change	ial Attainment Unstandardized	Scandardized
lace	.039	950.	-6.64*	*.23 <sup>*</sup>			F F	Beta .
Sex	.045	-006	1.02 (NS)			C10.	682	<b>*</b> 19 <b>*</b>
Tanta a tracta				• 04 (NS)	•018 •	<b>.</b> 003	.05 (NS)	.02 (NS)
PURCESSION PERSONNEL	.108	• 063	•12*	•21 <sup>*</sup> (.21) <sup>*</sup>	•058	070*	•10.	B/21 / #21
Child's Character- Istics	.126	.018	•10*	•15 <sup>*</sup> (.16) <sup>*</sup>	• 096	• 038	•	
Significant Ocher's Influence								<b>-</b> (67.) <i>1</i> 7.
Inside Family	.126	000•	(SN) 200°	(SN) 00°	.130	•034	• 00 s	
Outside Family	.126	• 000	(SN) 67	00 /201				-(01.) 60.
				( ev) no.	.137	.007	<b>5</b> (NS)	<b>.</b> 07 (NS)
Achievement Motivation (Occupational)	e				.348	.211	*0*	*(66.) *66.
* a < .05	Overal	.1 F (6,271)	- 6.58 <sup>*</sup> R <sup>2</sup> 1	(01°)E		Verall F (7	,270) <b>-</b> 20.62 <sup>*</sup>	12 - 35(.33)
NS - moc significant								
<sup>a</sup> Again, as in Table (0, significant variable; for achievement motiv <sup>b</sup> The results from the	, the pa s from ( vacion; remain(	th coeffici ach of the F(5,272) = ng regressi	ents in parenthes regression equari 28.41 <sup>±</sup> , R <sup>2</sup> = .34 on equations are	es reflect the va ons. The overall (adjusted R <sup>2</sup> = .3 reported in the A	lues of F (3, 3) for Ppendis	Frach coeff 174) = 13.09 educational : F, Table 3	tciencs after rem , R <sup>2</sup> = 13 (adju . attainment	oving the non- sted R <sup>2</sup> = .12)

Table 11. Indirect Effects of Selected Independent Variables on Occupational Artainment<sup>b</sup>

through achievement motivation and educational attainment variables.

Hypothesis 5: The final path model

The last hypothesis proposed examined the overall explanatory power of the path model for occupational attainment. It was stated, as follows:

H<sub>5</sub> Among low-income, southern, rural youth, the levels of influence of the selected independent variables (i.e., family background factors, child characteristics, and significant others' influences) and the intervening variables (i.e., achievement motivation and educational attainment) are positively related to the level of youth occupational attainment.

As shown in Table 12, hypothesis 5 is supported. The independent variables analyzed are a]] found to be significantly related -- either directly or indirectly -- to the outcome variable of occupational attainment, and the directions of the associations were all found to be positive, indicating that the levels of influence of the selected independent variables and intervening variables are positively related to the level of youth occupational attainment.

Table 10 also shows that 38 percent of the variability of occupational attainment is accounted for by

09
3.56 ttainment)
09.04 ttainment)
Characteristics
2
2
Characteristics;

Table 12. Decomposition of Effects of Significant Predictors of Occupational Attainment for Southern, Low-Income Rural Youth achievement motivation and educational attainment. Thirtyfive percent of the variability in educational attainment is explained by family background factors, child characteristics, significant others' influence inside the family, and achievement motivation. The resulting path diagram, with significant values of path coefficients, is illustrated in Figure 10. It shows the causal framework on a temporal dimension with path coefficient reflecting the magnitude of the effects of predictors on youth occupational attainment.

The remaining portion of this chapter is a brief discussion of the findings. Mainly, the impacts of the selected independent variables on youth career attainment are discussed.



Figure 10. The Path Model of Adolescent Career Development
 (All path coefficients are significant at < <.05 level)</pre>

# Discussion of Findings: The Effects of Different Environments on Youth Occupational Achievement

The discussion here will be focused on the decomposition of effects of the significant contexts of development of rural, low-income youth over time, from their preadolescent through the adolescent to post-adolescent years. As indicated, none of the independent variables of the study show any significant direct associations with occupational attainment, except educational attainment and achievement motivation. (Refer to Figure 10 and Table 11.) This means that any influence exerted by the family background factors, parenting behaviors and values, and child characteristics are mediated through these two intervening variables.

In addition, it should be noted that sex was found to have a significant effect on occupational attainment of youth, while race was not. In this case the level of girls' occupational attainment was found to be lower than that of boys, when the level of all other variables was held constant.<sup>1</sup>

It should also be noted that the limitations with regard to the instruments and the sample of the original

<sup>&</sup>lt;sup>1</sup>For a detailed discussion of gender differences in occupational attainment based on the same data set, refer to Kenkel (1980), and Kenkel and Gage (1983).

data set, and other limitations discussed previously (refer to pp. 11-14), apply to the findings of the present study. For example, the measurement of some variables was not given the same precision and throughness, as compared to other variables in the study. The influence of significant others in the family was assessed using multiple factors, while that of the outside members was assessed using one item. When assessing the relative importance of these variables on youth career development, this aspect should be taken into However, this should not minimize the extent of account. the family influence found in the present study. Perhaps. with more detailed and elaborate measures of significant others' influence outside family members, stronger effects might be found.

The following is a summary of the effects of each predictor on youth occupational attainment. They are presented in the order of descending importance (refer to Table 11).
# 1. <u>The Effect of Achievement Motivation</u> (as measured by occupational and educational aspirations and expectations)

indicated, achievement motivation [post-high As school occupational expectation, to be specific, (r = .6)with occupational aspiration)] was found to be the strongest predictor of occupational attainment. (Total effect is ₽ = .56 as compared to  $\beta$  = .09 for educational attainment. Refer to Table 12.) Haller et al., (1974), Otto and Haller (1979), and Shapiro and Crowley (1983) contend that youth achievement motivation is an important predictor of their educational and occupational achievement. This study finds that occupational achievement motivation is a strong predictor of both educational and occupational attainment (path coefficient with educational attainment = .33; withoccupational attainment = .53). Otto (1977) reported that the refinement of achievement motivation is closely tied to the main work that children and adolescents do over the developmental years, mainly, school work. Young people take into account their own ability when setting their aspirations (Sewell and Hauser, 1980; Otto and Haller, 1979), and family expectations are found to be an important influence as well (Leigh et al., 1986). As the path diagram shows (Figure 10), the results of this study indicate a similar causal ordering among these variables. Tables 10 11 that occupational achievement and show motivation significantly affects educational and occupational

attainment ( $\beta = .33$  and  $\beta = .53$ ). Also, youth achievement motivation is affected by family background factors ( $\beta =$ .21), and child's characteristics ( $\beta = .15$ ).

#### 2. The Effect of Family Background Factors

As shown in Tables 10 and 11, the effect of family background factors (measured in this study as a composite score of father or mother's occupation, father and mother's education, and mother's social participation score) on occupational attainment is only indirect, mediated through educational attainment, vouth achievement motivation, significant others' influences, and child's characteristics. Although there is no direct relationship observed, the total effect of family background factor exceeded that of educational attainment. (The total effect of family background factors is .18, as compared to .09 for educational attainment. Refer to Table 12.) This result is not surprising in that family background factors are conceptualized as an exogenous variable in the causal ordering of the present path model. Because of this, its influence on youth occupational attainment over a ten-year span is preceded and mediated through every other variable in the causal chain.

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3. The Effect of Child Characteristics

Child characteristics as measured in this study by preadolescent mental ability, self-concept, and academic motivation were not related directly to occupational attainment. However, their indirect effect measured through intervening variables of achievement motivation and educational attainment totaled .11, which exceeds the total effect exerted by youth educational attainment ( $\beta = .09$ ). (Refer to Table 12.)

The path diagram (Figure 10) shows not only the above causal relationships mediated through two intervening variables, but also its significant association with family background factors ( $\beta = .28$ ), and significant others' (i.e,. parents) influences ( $\beta = .24$ ).

#### 4. The Effect of Education

There is considerable evidence from prior research that the level of educational attainment is the best single predictor of youth occupational achievement (Blau and Duncan, 1967; Otto and Haller, 1979; Sewell and Hauser, 1975; Borus, 1983). While the present study does indeed find that educational attainment is one of several significant predictors of youth occupational attainment, the best predictor, however, is the youth's post-adolescent occupational expectations ( $\beta$  = .53, compared to  $\beta$  = .09 for educational attainment). In interpreting this finding it is important to note that in 1979 when the sample was asked about their educational attainment and their occupational aspirations and expectations they (in many cases) had been out of school for several years. This additional time would likely have helped them refine their occupational aspirations and expectations in line with the reality of their occupational world.

#### 5. The Effect of Significant Others' Influence (Parents')

The effect of parental influence is measured in this study by mother's achievement value orientation, child's perception of parental behavior, mother's child-rearing values, and mother's status projections (educational and occupational) for the child. Although this variable does not have a significant direct relationship with the youth occupational attainment, the total effect along the path was found to be .04 (refer to Table 12). The effect is indirect, but statistically significant, mediated through educational attainment and through its influence on shaping child's characteristics.

# <u>6. The Effect of Significant Others' Influence</u> (other than family members)

The effect of outsiders' influence (people outside the family -- teachers, peers, relatives, counselors, priests, neighbors, and adult friends) on youth occupational attainment was found to be insignificant (refer to "Conceptual and Operational Definitions of the Variables" in Chapter Three, pp. 54-61). There were no statistically significant associations found with any of the variables analyzed in the causal model (refer to Table 12). The insignificant effect of the outside members may be due to the measure used by the present investigator (refers to the discussion in pp. 95-96).

# The Effects of the Macrosystem

The present path model accounted for 38 percent of occupational attainment of southern, low-income, rural youth, using such predictors as youth achievement motivation and educational attainment (after controlling for the sex and race effects). Thirty-five percent of educational attainment is accounted for by family background, child characteristics, significant other's influence, and youth achievement motivation. In comparison, Blau and Duncan (1967) explained 40 percent of occupational attainment of males, 24-60 years of age, using such structural variables as educational and occupational status of the respondents, and educational and occupational status of the respondents' fathers.

The Wisconsin-status attainment model accounted for 34 percent of the occupational attainment of white males (whose fathers were farmers), using socio-psychological factors of occupational attainment as it was related to educational attainment. The variables that accounted for 50 percent of educational attainment were levels of educational and occupational aspirations, significant other's influence, academic performance, socio-economic status and mental ability.

Comparing the amount of variance explained by each yields the following conclusion. model Although the specific variables investigated by each study are different, the general conclusions based on the performance of those variables in each model can be summarized as corresponding to what status-attainment theorists have contended. Parents with different occupational status hold different expectations for their children. Parental expectations tend to be adopted by children, and children's expectations affect the occupation they eventually choose.

In this study, it was found that family background factors, child characteristics, and parental influence measured in elementary school years affect the level of achievement motivation in high school years. The level of achievement motivation in high school years is positively related to the level of achievement motivation in post-high school years, which is found to be the best single predictor for youth occupational attainment of all the variables investigated in the present study.

Thus, it can be concluded that the same, general interaction/transaction patterns asserted/found in status-

attainment theories and empirical research between the youth and their environments hold true for low-income youth career development. Therefore, in order to assess the differences in the achievement level of youth in different groupings, attention should be directed to the level of initial socioeconomic status of parents, or to the magnitude of influence exerted by similar variables.

In summary, it can be stated that the findings of the supported the overall explanatory power of study the (Thirty-eight percent proposed path model. of the variability in occupational attainment was accounted for by youth achievement motivation and educational attainment.) The findings of the study also confirmed the general findings of other studies that indicate the importance of the effects of home circumstances and family resources over the effects of schooling (Coleman et al., 1966). Although indirect, the total effect of family on youth occupational attainment is calculated as .22 (the effect of parental influence plus the effect of family background factors = .04+ .18), as compared to the total effect of educational attainment ( $\beta$  =.09). The effect of family influence on lowincome, southern, rural youth is also found to be larger than that of child characteristics (.22 as compared to .11). The magnitude of importance of the familial influence on youth career development over time is second only to youth achievement motivation.

Based on the findings of the present research, it can be concluded that for southern, low-income, rural youth, achievement motivation in the post-adolescent years is the best single predictor for youth occupational attainment (perhaps for the reasons discussed previously), followed by early family influence, child preadolescent characteristics, and educational attainment in the post-adolescent period. In other words, the importance of early family influence and child characteristics on the ultimate occupational achievement of the youth over time should not be overlooked, simply because they have no direct relationship to final occupational attainment.

#### CHAPTER V

# SUMMARY, CONCLUSIONS, AND IMPLICATIONS

### Summary

The primary emphasis of the present research was to examine the selected predictors of family background, child characteristics, significant others' influence, achievement motivation, educational attainment on the dependent variable of youth occupational attainment. The secondary purpose was to conceptualize youth career development from an ecological perspective, using the ecological variables in the growing vouth's environment. This study considered responses youth who had been followed over a ten-year period from beginning when they were in the fifth and sixth grades, and continuing through the post-high school years (four years after high school). The path modeling techniques utilized were based on the work of status-attainment research. Тο this, an effort has been made to add spatial and temporal dimensions of the ecosystem theory.

The sample for the original study (N = 544) represented youth from six southern states: 91 black males, 150 white males, 97 black females, and 206 white females. The original data from three data bases were collected

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through in-class and mail survey questionnaire procedures during the years from 1969 to 1979.

Based on an examination of the empirical (i.e., path) modeling efforts of status-attainment researchers, and of the theoretical modeling efforts of human ecologists, five hypotheses were formulated. The first hypothesis predicted the effect of the early socialization experience (i.e., family background factors, child characteristics, and significant others' influences) on early socialization outcome (i.e., youth achievement motivation as measured in terms of educational and occupational expectations and aspirations) at successive age levels. The results indicated that the effect of the early socialization experience measured when the youth were in grade school years was most strong in high school years and its effect diminished in post-high school years. However, the effect of early socialization was least apparent in the elementary school years.

Testing of the hypothesis that predicted the developmental trend of youth achievement motivation at successive age levels indicated that the level of youth achievement motivation decreased over time (except for the level of occupational aspiration). In addition, the gap between aspirations and expectations increased as the youth grow older. Also post-adolescent achievement motivation was positively related to that of the earlier periods (although

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this relationship held true only for the post-adolescent occupational expectations with earlier educational expectations). And finally, post-adolescent achievement motivation was positively related to the final educational and occupational attainment.

In reference to the last two hypotheses, the findings indicated that the level of youth occupational attainment was directly affected by their achievement motivation and educational attainment. The effects of family background factors, child characteristics, and significant others' influence were found to be mediated through youth achievement motivation and educational attainment.

# Conclusions

The following conclusions may be made based upon the findings from the present study:

1. The career development of southern, low-income, rural youth is influenced by such ecological factors as the individual human system (i.e., youth mental ability, academic and achievement motivation, and self-concept), the family system (i.e., family structural variables such as occupational and educational status of parents, and mother's "social participation," as well as family process variables such as parenting practices, values, maternal achievement orientations and status projections), and the school system. 2. The magnitude of importance of the human system (which includes the variable of youth achievement motivation) is found to be larger than other systems investigated in the study. This is followed by familial influence, and the schooling effect. However, as a result of this study, it has been shown that the contributions of the family system to the individual system outcomes are substantial, and frequently underestimated.

3. The best single predictor for the occupational attainment of low-income, southern, rural youth is found to be their post-adolescent achievement motivation.

4. The impact of early socialization experience (i.e., family background factors, parenting variables, and youth early characteristics) on youth career development is indirect, mediated through youth achievement motivation and educational attainment.

5. For southern, low-income, rural youth, the findings indicate that the level of occupational aspiration does not change over time. But the level of occupational expectations, as well as the level of educational aspiration and expectations, do change (decline) over a ten-year period. This makes the gap between occupational aspirations and expectations larger as youth grow older.

6. As in status attainment research on youth career development, the findings of the present study support a similar causal chain for the career development of southern, low-income, rural youth, as follows:



#### Implications

#### Implications for the Family Ecosystem Theory

The implications of the present study for the Family Ecosystem theory need to be limited to a specific kind of development: that of career attainment process of lowincome youth in southern, rural area. The findings from this study suggest several important implications for the Family Ecosytem theory regarding its basic assumptions described in Chapter two (pp. 41-42).

This points out that one of the study major considerations of а researcher who studies career development of youth from an ecological perspective is the inclusion of both spatial and temporal dimensions of the growing youth's environment. The inclusion of the temporal dimension is found to be important, since some of the predictors, as in the case of family background factors and parenting variables, do not show statistically significant, direct associations with the final occupational attainment which is assessed four years after high school.

Researchers who had focused on youth career development after adolescent years are, therefore, likely to report no relationships between these early influences and final attainment variables. Furthermore, they might well conclude that family influence is not a significant factor in youth career development. In this case, the long-term, indirect effect of the family is likely to be overlooked and minimized.

The inclusion of the spatial dimension is also found to be important, since it allows the researcher to assess the magnitude of influence of different environmental systems of the youth. For example, the researcher can examine those that have immediate contacts with the growing youth as well as those that have less direct contact with the developing person (e.g., macrosystem variables). The above finding is related to the Family Ecosystem theory (e), stated in Chapter two (p. 42). The assumption assumption states that youth career development must be examined in its wholeness -- both spatial and temporal -- of interactions and interdependence.

The second and third considerations for the researcher with an ecological orientation are to view the family context as a functioning whole, and to emphasize the importance of the interdependencies that exist between and within environmental structures. The findings of this study confirm significant influences of family variables on youth career development. Both the salient features of the family context (e.g., SES, residence) and other process features (e.g., parenting practices and values) are found to have positive associations with youth occupational attainment. This finding can be tied to basic assumptions of Ecosystem Theory (c), (d), and (e) stated in Chapter two. These assumptions emphasize the role of the family system as a significant environment for individual's development.

The findings from this study also implied that career development is an interaction between the youth and his/her environments, and that both human (or individual) and environmental variables need to be considered to paint a realistic picture of the developmental process. Individual traits such as self-concept, mental ability, academic and achievement motivations are found to be positively related to career development. Environmental factors such as family background factors, parental influences, and educational attainment were also found to be associated with youth career development. This implication can be tied to basic assumption (a) (p.41), which assumes the importance of interactions between the individual his/her and environments.

The last issue that needs to be considered relative to ecological perspective is the impact of human system (the individual) on his/her own development. The influence of the macrosystem may be as pervasive as Bronfenbrenner

suggests it is. However, the power of the human variable may have the potential to modify the potential influence of these systems, at least from the findings of the study: the best single predictor for the final occupational attainment is youth achievement motivation. Although youth career development is conceptualized in this study as a product of interaction/transaction between the organism and the environment, it was found that the individual youth is the final enactor and decision-maker of his/her life-plans and what s/he wants to become. He or she. however, is influenced by the environment. This implication can be tied to basic assumptions (a) and (b) of the Ecosystem theory stated in Chapter two. These assumptions emphasize the capability and necessity of an individual to interact with the environmental systems and to be influenced by them.

In summary, the following can be implied from the findings of the study:

(1) Career development is one of the functions of the family. Both family structural variables and family process variables are important factors that contribute to youth career development.

(2) The impact of the individual human system is important in this process. The study shows that the human is capable of interacting with the environmental input (both as an actor and reactor), and that the level of final output to the environment is determined by the human system. (3) Career development of youth must be examined in its wholeness -- both spatial and temporal -- of interactions and interdependence.

# Implications for Future Research

In examining an ecological model of youth occupational attainment, several alternatives might be considered for future research. One such alternative is a life-span approach to the study of career development. Although it may not be applicable to the research dealing youth, future research focusing with on a life-span ecological approach -- to see how careers develop later in life -- will provide strong, reliable, and valid information about how career aspiration is formed in early years, how they are achieved, and/or how they are changed. Other traits that influence fulfilment of aspirations should also With regard to family influence on this be studied. process, a distinction between the family of orientation and of procreation must be made; this aspect should be added along the temporal dimension.

In examining the impact of the family system, the importance of the interactive variables should be noted. If the need for an ecological model is as strong as implied, and if the need to look at all of interactive variables is as important as some family researchers contend, then the creation of interactive variables which carry the essence of what is important to the career development of the children in the family is needed. For example, both the structural (e.g., parent's educational and occupational variables status) and functional variables (e.g., parenting practices and values) of the family system in this study are found to have significant effects on youth occupational achievement. This points out the need to analyze the interactional patterns between parents and children according to the bidirectional nature of the parent-child dvad. Τo accomplish this, the use of more sophisticated statistical methods that the bidirection can assess between the variables are suggested. One possibility is the use of LISREL (Linear Structural Relations).<sup>1</sup>

One other factor that should be considered is that parental status also changes over the years. To date, parental status is permitted to shift during the career decision years. The use of traditional statistical methods that do not measure the changes over time does not capture the essence of the theory.

<sup>&</sup>lt;sup>1</sup>The validity of the path analysis was predicted on a set of very restrictive assumptions, some of which are that: (1) the variables are measured without error; (2) the residuals are not intercorrelated; and (3) the causal flow is unidirectional (i.e., the causal relationship is closed.) As compared to this, LISREL is a very versatile approach that may be used for the analysis of causal models with multiple indicators of latent variables, measurement errors, correlated errors, or reciprocal causation (Pedhauzer, 1983).

The last issue related to the life-span approach centers around occupational and familial changes over historical time. The overarching sociocultural context is constantly changing; and in response the familial context, career development, and the links between the two also change. At a conceptual level, the impact of sociocultural change on career development has been recognized (e.g., Lyon, 1965; Vondracek and Lerner, 1982; Vondracek, Lerner, and Schulenberg, 1983), but has not been incorporated into the design of empirical research.

The original research of the present investigation spans the past two decades, during which numerous changes have occurred that may have altered the family context, and the career development (e.g., equal opportunity legislation, shifting sex-roles, and increased rate of maternal employment). As a result the generalizability and comparability of empirical findings to those of different historical times may be limited.

Another alternative for future research is related to the amount of variance explained by selected predictors. Findings from the present study as well as from other research indicated that a large portion of variability in occupational attainment process is still unexplained. Thus, the need to develop better measures for existing variables and to incorporate new variables is important. One area which needs additional research is that involving the scale

of measurement of the dependent variable (i.e., occupation). The definition of occupation is important to the study of occupational choice. because the definition affects empirical relationships and theory. Yet, occupation has not been clearly defined in the professional literature. In operational criteria particular. for differentiating occupations are subjective and, undoubtedly, exhibit low reliability. In the present study, the scale of measurement was based on a prestige continuum (Reiss, 1961). However, a multidimensional scheme of classifying occupation would be more realistic. Viewing occupations as points in multidimensional space is a generalization of the standard sociological practice of assigning prestige scores to occupations thereby generating a one-dimensional space. Hotchkiss and his associates (1979) suggest that additional variables defining the multi-dimensions of occupations might include variables such as average income, public perceptions of the degree to which the occupation provides a community service, and/or the degree of job autonomy.

Another in which future research area mav be indicated is the incorporation of different systems in youth environment. The findings of this study indicate the need to include environments other than the ones studied. The used in the present investigation accounted model for approximately 40 percent of the variance of career development of low-income rural youth. Conversely, this

means that even larger portions of the variance (about 60 percents) are left unexplained. Such variables might include more dimensions of micro-, meso-, exo-, and macro-system environments than were investigated in the present study. The present study focused on low-income southern youth. Future research would be indicated for other minority groups to compare the macrosystem differences among different social groups.

Lastly, in terms of theory building, future qualitative research may be desirable in addition to quantitative research. A certain number of low-income youth faced with many disadvantages toward attainment nevertheless do succeed. Qualitative research, such as the use of indepth interviews and case studies would be of much theoretical value in the study of this group of individuals.

A full coverage of the dynamics of the process of occupational attainment requires numerous observations on the same individuals within each stage of the life cycle as well as between stages. Completing a life history for a single cohort, by definition, requires a lifetime to assemble. By the time the last panel of data is collected, many of the measurements would be obsolete. Consequently, it seems that the next important step in empirical research in this area is to increase the number of data banks with two or more panels of data within the "family" years, "schooling" years, and "job" years. It is possible that one might assemble enough information from existing data sources to construct preliminary estimates of a path model covering family, schooling, and early adult job changes. To do so will require substantial time, care, staff and money and it certainly is beyond the capacity of one individual researcher. At this point in time, one thing seems clear: considerable empirical, methodological, and conceptual work remains before a thorough understanding of the socioeconomic life cycle is achieved.

# Implications for the Education of Early Adolescents

Early adolescents need the opportunity to learn about a wide variety of occupations and training requirements for those occupations that will provide them with more options as they move through adolescence into the adult life. Educators of early adolescents need to include these opportunities keep those career options and open by informing the youth of the kinds of opportunities that are available in their community, and in the larger society. One finding of the present research is that the best single predictor for low-income, rural youth career attainment is youth achievement motivation. Another finding is that the level of youth occupational aspirations does not change over the years; however, the youth adjust (lower) their level of occupational expectation as they grow older. It is partly, if not entirely, society's responsibility to remove those

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obstacles that these youth perceive as a hindrance to achieving their goal, and help the youth in these groupings to convince themselves of their own ability/will to become the enactor of their earlier aspirations.

# Implications for Parent Education

The findings of the present study indicate the importance of the family influence on career development. Parents need to be aware of the fact that they can make an impact on their children's career choices, and achievement of children's career aspirations. If it is assumed that career development has much in common with other kinds of human development, the findings of the study as well as of a substantial body of research evidence indicate that parents must acknowledge that they have unique roles to play in the career development of their adolescent children. BIBLIOGRAPHY

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APPENDIX A

VARIABLES BY CONCEPTUAL CATEGORY

Category	1969	1975	1979
<ol> <li>Family Background Factors         -Education of Parents:fathers         mothers         -Occupation of the breadwinner         (mothers' if not fathers')         -Mother's social "participation"</li> </ol>	X X X		
score 2. Significant Others (Parenting Factors) a) Mother's achievement orientation -mother's score on achievement values	x x		
<ul> <li>b) Mother's child rearing value orient;</li> <li>"mother wants her child to have character"</li> <li>"mother emphasizes outgoing child"</li> </ul>	ation X X		
<ul> <li>c) Mother's status projections for chi -mean score of mother's aspirations and expectations for child's education</li> <li>-mean score of mother's aspirations and expectations for child's isb place</li> </ul>	ld X		
d) Perception of mother's affective be -child's perception of mother's puniching behavior -child's perception of mother's demanding behavior -child's perception of mother's	havior X X		
loving behavior 3. Child Characteristics -Mental ability (IQ) -Self-concept -Child's academic motivation (includes "liking" school)	X X X X		
4. Significant Others -Teachers, relatives, friends (adults an peers), and/or others (preachers, neighbors etc.)	nd X		

# Variables By Conceptual Category

		(con	t'd)
5. Achievement Motivation -educational aspirations and			
expectations	X	X	X
expectaions	X	X	Х
6. Educational Attainment			Х
7. Occupational attainment			Х
Sex	X		
Race	X		

APPENDIX B STUDENT SURVEY FORM BASELINE QUESTIONNAIRE

YOU About the kind of job you might have when you	Do you live with your mother (or stepmother)? 11. Put a check by each of the people who have <u>talked</u> with you about the kind of iob you might have when you	<pre>the waitableer being measured and the source of the scale BMSELINE PHASE BMSELINE BMSELINE PHASE BMSELINE BMMELINE BMMELINE</pre>
Do you live with your mother (or stepmother)?		2. ten 5. thirteen 3. eleven 6. fourteen
2. ten     5. thirteen     10. What kind of job do you think you really will have when you grow up?       3. eleven     6. fourteen       Do you live with your mother (or stepmother)?     11	2. ten     5. thirteen     10. What kind of job do you think you really will have       3. eleven     6. fourteen	How old are you? 1. nine 4. twelve
How old are you? 1. nine 4. twelve 5. finish college 5. finish college 5. finish college 5. don't know 5. thirteen 10. What kind of job do you think you <u>really will</u> have 5. thirteen 10. When you grow up? 3. eleven 6. fourteen 11 pire other up?	How old are you? 1. nine 2. ten 3. thirsh college 4. twelve 10. What kind of job do you think you <u>really will</u> have 4. twen you grow up? 5. thirteen 5. thirteen 5. thirteen 6. fourteen 5. thirteen 5. thirteen 6. fourteen 5. thirteen 6. fourteen 7. thish college 7. thish college 6. don't know 10. What kind of job do you think you <u>really will</u> have 7. thirteen 7. thirteen	Telephone Number
Telephone Number       1. finish 8th grade         Telephone Number       2. finish 8th grade and go to a trade school         How old are you?       3. finish high school         How old are you?       4. twelve         1. nine       4. twelve         2. ten       5. finish high school and go to a trade school         1. nine       4. twelve         2. ten       5. thirteen         3. eleven       10. What kind of job do you think you really will have         3. eleven       6. fourteen         1. eleven       11	Telephone Number       1. finish 8th grade         Telephone Number       2. finish 8th grade and go to a trade school         How old are you?       3. finish high school         How old are you?       5. finish high school and go to a trade school         1. nine       4. twelve         2. ten       5. thirteen         1. nine       5. thirteen         1. nine       6. don't know         2. ten       6. don't know	Address (give road or street and number if possible)
Address (give road or street and number if possible)       b. How far do you have to go in school to get that kind of job?         Telephone Number       1. finish 8th grade         Bow old are you?       1. finish 8th grade and go to a trade school         Bow old are you?       4. twelve         1. nine       4. twelve         1. nine       5. thirteen         1. nine       6. fourteen         1. nine       6. fourteen         1. nine       10. What kind of job do you think you really will have         1. eleven       6. fourteen         1. eleven       10. When you grow up?	Address (give road or street and number if possible)       b. How far do you have to go in school to get that         Telephone Number       b. How far do you have to go in school to get that         Telephone Number       b. How far do you have to go in school to get that         Telephone Number       b. How far do you have to go in school to get that         Telephone Number       b. How far do you have to go in school to get that         How old are you?       c. finish 8th grade and go to a trade school         How old are you?       c. finish high school         1. nine       4. twelve         2. ten       5. thirteen         3. eleven       6. don't know         3. eleven       6. fourteen	Parents' Name
Parents' Name       Up?       Up?       Up?       Up?       Up?       Up far       Up far <td< td=""><td>Parents' Name       Up?       Up       Up       Up       Up       Up       Up       Up       Up       Up</td><td>2. Girl</td></td<>	Parents' Name       Up?       Up       Up       Up       Up       Up       Up       Up       Up       Up	2. Girl
2. Girl       3. If you could choose any job you wanted, what kind of job would you really like to have when you grow up?         Parents' Name       0f job would you really like to have when you grow up?         Address (give road or street and number if possible)       b. How far do you have to go in school to get that kind of job?         Address (give road or street and number if possible)       b. How far do you have to go in school to get that kind of job?         Address (give road or street and number       1. finish 8th grade and go to a trade school         How old are you?       2. finish high school and go to a trade school         How old are you?       5. thirteen         1. nine       4. twelve         1. nine       5. thirteen         1. nine       5. thirteen         1. eleven       6. don't know         2. ten       5. thirteen         2. ten       5. thirteen         1. eleven       1. hen you grow up?	2. Girl     9. a. If you could choose any job you wanted, what kind of job would you really like to have when you grow up?       Parents' Name     06 job would you really like to have when you grow up?       Address (give road or street and number if possible)     b. How far do you have to go in school to get that kind of job?       Address (give road or street and number if possible)     b. How far do you have to go in school to get that kind of job?       Address (give road or street and number if possible)     b. How far do you have to go in school to get that kind of job?       I time     1. finish 8th grade       Bow old are you?     1. finish 8th grade and go to a trade school       1. nine     4. twelve       1. nine     4. twelve       2. ten     5. thirteen       3. eleven     6. don't know	1. Boy
1. Boy     1. Boy       2. Girl     2. Girl       Parents' Name     of job would you could choose any job you wanted, what kind of job would you really like to have when you grow drow       Address (give road or street and number if possible)     9. a. If you could roose any job you wanted, what kind of job would you really like to have when you grow       Address (give road or street and number if possible)     9. a. If you could you really like to have when you grow up?       Address (give road or street and number if possible)     b. How far do you have to go in school to get that kind of job?       Address (give road or street and number     1. finish 8th grade       Address (give road or street and number     1. finish 8th grade       Address (give road or street and number     1. finish 8th grade       Address (give road or street and number     1. finish 8th grade       Address (give road or street and number     1. finish 8th grade       Address (give road or street and number     1. finish 8th grade       Address (give road or street and number     1. finish 8th grade       Telephone Number     1. finish 8th grade       Address (give road are you?     1. finish 8th grade       Address (give road)     2. finish high school and go to a trade school       Address     3. finish high school and go to a trade school       Address     5. thirteen       Address     1. hine       Address     1. hine   <	1. Boy     3. no       2. Girl     • If you could choose any job you wanted, what kind of job would you really like to have when you grow up?       Parents' Name     • If you could choose any job you wanted, what kind of job would you really like to have when you grow up?       Address (give road or street and number if possible)     • If you could choose any job you wanted, what kind of job would you really like to have when you grow up?       Address (give road or street and number if possible)     • If you could choose any job you wanted, what kind we have when you grow up?       Address (give road or street and number if possible)     • If finish fish grade and go to a trade school       How old are you?     • twelve       I. nine     • twelve       1. elven     • four twou	Grade
Grade       2. yes, a little         1. Boy       3. no         2. Girl       of job would you created, what kind of job would you really like to have when you grow up?         Parents' Name       9. a. If you could choose any job you wanted, what kind of job would you really like to have when you grow up?         Address (give road or street and number if possible)       9. a. If you could do you have to go in school to get that kind of job?         Address (give road or street and number if possible)       b. How far do you have to go in school to get that kind of job?         Address (give road or street and number if possible)       b. How far do you have to go in school to get that kind of job?         Bov old are you?       1. finish fith grade and go to a trade school         Bov old are you?       3. thitteen         1. nine       4. twelve         1. nine       5. thitteen         1. nine       5. thitteen         1. eleven       6. fourteen         1. eleven       10. What kind of job do you think you really will have when you grow up?	Grade       2. yes, a little         1. Boy       1. Boy         2. Girl       0. If you could choose any job you wanted, what kind up? job would you really like to have when you grow up?         Parents' Name       9. a. If you could choose any job you wanted, what kind up? job would you really like to have when you grow         Address (give road or street and number if possible)       9. a. If you could you really like to have when you grow of job?         Address (give road or street and number if possible)       b. How far do you have to go in school to get that kind of job?         Telephone Number       1. finish 8th grade and go to a trade school         Bow old are you?       4. twelve         1. nine       4. twelve         1. nine       5. thirteen         1. nine       5. thirteen         1. eleven       6. fourteen	School
School       1. yes, a little         Grade       2. yes, a little         J: Boy       3. no         2. Girl       0. girly vanted, what kind         Parents' Name       9. a. If you could choose any job you wanted, what kind         Parents' Name       9. a. If you could choose any job you wanted, what kind         Parents' Name       9. a. If you could you really like to have when you grow         Address (give road or street and number If possible)       9. a. If you could you really like to have when you grow         Address (give road or street and number If possible)       9. a. If you could you really like to have when you grow         Address (give road or street and number If possible)       9. a. If you could on have to go in school to get that kind of job         Address (give road or street and number If possible)       1. finish Bth grade and go to a trade school         How old are you?       1. nine       4. twelve         It in hime       4. twelve       5. finish high school and go to a trade school         1. nine       5. thirteen       10. What kind of job you think you trade school         1. eleven       6. fourteen       11         1. eleven       6. fourteen       11	School       1. yes, a lot         Drade       2. yes, a little         1. Boy       3. no         2. Girl       3. no         2. Girl       1. no         3. Girl       1. no         Parents' Name       1. fyou could choose any job you wanted, what kind up?         Address (give road or street and number if possible)       9. no         Address (give road or street and number if possible)       9. How far do you have to go in school to get that kind of job?         Mod tare you?       1. finish 8th grade       1. finish 8th grade         Bow old are you?       2. finish high school       1. finish high school         Bow old are you?       5. finish high school       1. finish high school         1. nine       4. two       5. finish high school       1. no         2. ten       5. thirteen       10. What kind of job you think you traily will have	Name State
dame       9. Have you ever thought about what kind of job you might         State       1. Yes, a lot         Stade       2. Yes, a little         Stade       3. no         1. Boy       3. no         State i little       3. no         Bernts' Name       9. a. If you could choose any job you wanted, what kind op?         Address (give road or street and number if possible)       9. a. If you could choose and go to a trade school         Address (give road or street and number if possible)       b. How far do you have to go in school to get that kind of job?         Statish in the school       1. finish figh school and go to a trade school         Bov old are you?       4. twelve         Bov old are you?       4. twelve         Bov out inve with your mother [or stepmother]?       1. how you grow up?         J. eleven       5. thirteen         Do you live with your mother [or stepmother]?       1. how you grow up?	dame       8. Have you ever thought about what kind of job you might have when you grow up?         School       1. yes, a lot         School       2. yes, a little         School       3. no         State       3. no         Address (give road or street and number if possible)       9. a. If you could you really like to have when you grow         Mddress (give road or street and number if possible)       b. How far do you have to go in school to get that kind of job vould you really like school         How old are you?       1. nine       4. twelve         In in how       5. thirteen       10. What kind of job you think you really will have         J. eleven       6. don't know       10. What kind of job you think you really will have	round Information)
round Information) (Occupations Aspirations and Expectations) tame (Occupation) (Occupations and Expectations) tate (Occupations) (Occupations) (Occupations) (Occupations) (I yes, a little (I yes, a little (	round Information) (Occupational Appirations and Expectations) tame (a constrained of job you might be constrained of job you might be constrained of job you might be constrained of job you might constrained of job you wated, what kind of job would you vanted, when you grow up?   Telephone Number	7
L     IIENS 8-16       round information)     (Occupational Appirations and Expectations)       name     (Decupational Appirations and Expectations)       tete     (Decupational Appirations)       tete     (Decupational Appirations)       name     (Decupational Appirations)       tete     (Decupational Appirations)       name     (Decupations)       namo     (Decupations)	Induction       ITEMS 8-16         round Information)       (occupational Aspirations and Exectations)         tate       (occupational Aspirations and Exectations)         tate	
2       T. FUTURE PLANS FOR MORK AND SCHOOL         round Information)       (Occupational Aspirations and Exectations)         Ama       (Occupational Aspirations and Exectations)         Exchool       1. yes, a little         1. Boy       2. yes, a little         2. Girl       3. no         3. Girl       0. oculd Fouces any job you vanted, what kind of job would you Early like to have when you grow up?         Address (give road or street and number if possible)       9. a. If you could or you early like to have when you grow up?         Address (give road or street and number if possible)       9. a. If you or at street ach or at street ach or at street ach or or at street achool up?         Address (give road or street and number if possible)       9. a. If you or at street achool or at street achool up?         Address (give road or street ach or at street achool	Image: Series of the sector	SURVEY OF STUDENT PLANS FOR WORK AND SCHOOL
2       If FUURE PLANS FOR NORK AND SCHOOL         1       FUTURE PLANS FOR NORK AND SCHOOL         1       FUTURE PLANS FOR NORK AND SCHOOL         1       ITEN 58-16         nound information)       (Occupational Appirations and Epectations)         texted	SURVEY OF STUDENT PLANS FOR MORK AND SCHOOL       I. FUTURE FLANS FOR WORK AND SCHOOL         Image: State S	BASELINE PHASE
BACELINE PAUSE       Life to your relating manuar function         BUNVEY OF STUDENT FLANS FON NORK AND SCHOOL       Disease f value for our stease function is streage for our streage streage for our streage for our streage	BACLINE MACE       BACLINE MACE         BURNEY OF STUDENT FLANS FOR NORK AND SCHOOL       If E WAY THAT SEEMS EST TO YOU ANSWERT ENCH QUESTION         SURVEY OF STUDENT FLANS FOR NORK AND SCHOOL       If E WAY THAT SEEMS EST TO YOU         I       FUTURE FLANS FOR NORK AND SCHOOL         INFO       Information)         Information)       Information         Information)       Information         Information       Information	erury except for the summitten of some phrases whith e variables being measured and the source of the scale s. These phrases are printed in Gothic style.)
You about the kind of job you might have when you grow up? (You may check more than one.)	11. Put a check by each of the people who have talked with you about the kind of job you might have when you grow up? (You may check more than on you)	

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<pre>1. mother 2. father 3. older brother or sister 4. another relative 5. teacher 6. preacher 7. adult friend or neighbor 9. other (Who? 0. no one</pre>	l6. How far do you think your parents would like you to go in school?	<pre>1. 8th grade 2. 1 or 2 years of high school 3. 9o to a trade school instead of finishing high school 4. finish high school 5. finish high school and go to a trade school 6. 1 or 2 years of college 7. finish college</pre>	17. How do your parents feel about your finishing high school?	ITEM 18 ITEM 18 Itey would rather I finish I they would rather I didn't finish ITEM 18 ITEM 18	(Talking with parents about education) 18. Have you ever talked to your parents about dropping ou before finishing high school?	1. Yes, a lot       2. Yes, a little       3. no       ITEMS 19-24       (ElderAcademic Motivation)	11. FELLINGS ABOUT SCHOOL. Read each statement as I read it and check one answer that best tells me how you feel about school.
1. mother2. father3. flather3. older brother or sister4. another relative5. teacher6. preacher7. adult friend or neighbor9. other kids0. no one	Whose advice is more important to you about your future plans? (Check only one.)	<pre>1. mother 2. father 3. older brother or sister 4. another relative 5. teacher 6. preacher 7. adult friend or neighbor 8. other kids 0. other (Who? )</pre>	0. no one If you had your choice, how far would you like to go in schools?	<pre>1. 8th grade 2. 1 or 2 years of high school 3. 90 to a trade school instead of finishing high 4. finish high school 5. finish high school</pre>	6. 1 or 2 years of college 7. finish college How far do you think you <u>really will</u> go in school?	<pre>1. Bth grade 2. 1 or 2 years of high school 3. go to a trade school <u>instead</u> of finishing high school 4. finish high school 5. finish high school and go to a trade school 6. 1 or 2 years of college 7. finish college</pre>	Put a check by each of the people who have talked with You about how far you should go in school.

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GENERAL QUESTIONS. Read each statement as I read it and check <u>one</u> answer that best tells how you feel. III.

- 1. wait one or two years and have my parents
- 1. like giving reports before the class
  2. don't like giving reports before the class

44. I would choose as work-partners	<pre>1. Other children who do well in school 2. Other children who are friendly</pre>	IV. MOTHERS AND CHILDREN. The following questions are about	different ways that mothers act toward their children. Read each statement as I read it and check the answer Which you think is most like your mother.	ITE45 45-49	(Elder Scale)	(Child's Perception of Mother's Degree of Communication and Independence Training)	45. When she punishes me she tells me why, if I don't know.	<pre>l. always</pre>	<pre>3. sometimes 4. hardly ever 5. never</pre>	46. When she decides things or makes rules for me, she tells	my why. 1. always	2. most of the time 3. sometimes 4. hardly ever	5. never 47. When I do something she doesn't like she talks to me and explains or reasons with me, instead of punishing me.	1. always 2. most of the time 3. sometimes	<pre>4. hardly ever 5. never</pre>	<ul> <li>48. Does she let you decide things for yourself more than she did a year or two ago?</li> <li>1. much more</li> <li>2. a little more</li> <li>3. about the same</li> <li>4. a little less</li> <li>5. much less</li> </ul>
34. When I am playing in a game or sport I am	<ol> <li>Bore interested in having fun than in winning</li> <li>Bore interested in winning</li> </ol>	35. When I am sure I can do a job	1. I enjoy doing it more 2. I become bored	36. When I play a game	1. I hate to lose 2. I love to win	37. After summer vacation I am	1. glad to get back to school 2. not glad to get back to school	38. I talk in class (answer questions or discuss)	1. less than other students 2. more than other students	39. I enjoy sports more when I play against	1. One other player 2. several other players	40. If I were getting better from a serious illness I would like to	<pre>1. spend my time learning how to do something 2. relax 41. I like plaving a game when r</pre>	1. as good as my playmate 2. much better than my playmate	42. I prefer classes in which	1. the students were all as good as one another at the work         2. I was better than almost all the others         3. I was better than almost all the others         41. When I do things to help at home, I prefer to         1. do usual things I know I can do         2. do things that are hard and I'm not sure I can do

49. How are most things decided between you and your Mother?	1. she just tells me what to do 2. we talk about it, but she usually does the deciding 3. we talk about it, but I usually get to do what I want 4. I can do what I want no matter what she thinks	Rentententente Breest Breest Strutter Strutter	<pre>// control content behavior questionnaire) (Mother's Behavior as Perceived by the Child) (loving, demanding, and punishing)</pre>	50. I can talk to her about anything	1. always 2. most of the time 3. sometimes 5. never 5. never	51. When I go someplace for the first time, she comes with me to make sure that everything goes well.	1. always 2. most of the time 3. sometimes 5. never 5. never	52. She says that I have to get her permission first when I want to go somewhere or play with my friends	1. always 2. most of the time 3. sometimes 5. never 5. never	53. She makes me work hard on everything I do	1. always         2. most of the time         3. scoretimes         4. hardly ever         5. never
--	--	--	--	--------------------------------------	--	--	--	--	--	---	---

- 54. I can talk her into most anything
- 1. always

   2. most of the time

   3. sometimes

   4. hardly ever

   5. never
  - 55. She is fair when she punishes me

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- 56. She seems to be upset and unhappy when I do not behave myself
- 1. always
  2. most of the time
  3. sometimes
  4. hardly ever
  5. never
- 57. She is happy to be with me

tine	
the es ever	
ways st of metim rdly ever	

58. She makes me feel good and helps me when I have troubles

always	most of the time	sometimes	hardly ever	never .
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59. She worries and is afraid that I cannot take care of myself

	time	•		
	f the	Bes	ever	
luays	ost o	ometin	ardly	ever
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67. She tells me I can't roam or wander around because something might happen to me	1. always         2. most of the time         3. sometimes         4. hardly ever         5. never	dren 68. She tells me exactly when I should be home	1. always         2. most of the time         3. sometimes         4. hardly ever         5. never	69. She tells me that I must get very good grades in school	1. always         2. most of the time         3. sometimes         4. hardly ever         5. never	70. She finds it hard to punish me	1. always         2. most of the time         3. sometimes         4. hardly ever         5. never	71. When she punishes me, she explains why	1. always         2. most of the time         3. sometimes         4. hardly ever         5. never	72. She tells me, "I don't want to have anything more to do with you," when I do not behave myself	1.       always         2.       mout of the time         3.       sometimes         4.       hardly ever         5.       never	-
Vnen I		r childre				s why						

- 60. She wants to know exactly how I spend my money when I want to buy some little thing for myself
  - 1. always
    2. most of the time
    3. sometimes
    4. hardly ever
    5. never
    61. She tells me that I have to d
- She tells me that I have to do better than other chil

t i ae
the ever
ar of drige

62. She lets me off easy when I am bad

	the time	265	ever	
L. always	2. Bost of	<ol> <li>sometin</li> </ol>	I. hardly	5. never

63. When I have to do something for her she explains wh

always	most of the time		naruly ever	19491
		•	; .	ij

64. She makes me feel ashamed when I am bad

always	most of the time	sometimes	Darging ever	
4				i

65. She says nice things about me to other people

always					
-i- 				;	

66. I feel that she is there for me when I need her

aluays	most of the time Sometimes	hardly ever	never
-i- 		; 	<b>~</b>

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poof
Very
-
Bother
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73.

- always most of the time sometimes hardly ever never
- She say nice things to me when I do something good 74.

always	most of the time	Some times	nargly ever	JEAST
		;,		

75. She punishes me by sending me out of the room

		£	e a year	
day	Veek	mont	twic	
almost every	about once a	about once a	only once or	
 			;. 	

76. She teaches me things I want to learn

a year
day week month twice
almost every about once a about once a only once or never
-i -

77. She tells me that other children behave better than I do

<b>a</b> year
day week month twice
almost every about once a about once a only once or never

78. She slaps me

r day	Teek	1 month	: twice a ye		
. almost every	. about once a	. about once a	· only once of	. never	

ä

79. She punishes me by making me do extra work

			a year	-
day	Xaar	Bonth		
almost every	about once a	about once a	OUTY ONCE OF	never
 	;; 	;,	; 	

- She goes on pleasant walks and trips with me 80.

- almost every day about once a week about once a month only once or twice a year never
  - ||
- She wants me to run errands or do favors for her 81.
- almost every day about once a week about once a month only once or twice a year never ; <del>;</del> ' |
  - ÷...
- She punishes me by not letting me play with other children 82.
  - almost every day about once a week about once a month only once or twice a year never \*\*\*\*\* ||||||

- မီ She helps me with my hobbies or things I like to 83.
- almost every day about once a week about once a month only once or twice a year never
- She pesters me and keeps telling me to do things 84.
- almost every day
   about once a week
   about once a month
   anuty once or twice a year
   never
- She spanks or hits me 85.
- almost every day about once a week about once a month only once or twice a year never .... ÷.
  - ÷...

- She punishes me by not letting me do things I really enjoy 86.
- only once or twice a year never almost every day about once a week about once ŝ
- She enjoys talking with me 87.
- about once a week about once a month only once or twice a year never almost every day 4.5
- She wants me to keep my own things in good order 88.
- almost every day about once a week about once a month only once or twice a year never .... s. ÷
- She punishes me by sending me to bed early **8**9.
- almost every day about once a week about once a month only once or twice a year never 4994 s.
- She helps me with my school work when I do not understand something 90.
- almost every day about once a week about once a month only once or twice a year never s. ÷
- She tells me I am bad and yells at me 91.
- almost every day about once a week about once a month only once or twice a year never ŝ ------

- She says she will spank or hit me if I am bad 92.
- almost every day about once a week about once a month only once or twice a year
- never
- She punishes me by taking my favorite things away 93.
- almost every day about once a week about once a month only once or twice a year never
- She wants me to help around the house or yard 94.
- almost every day about once a week about once a month
- only once or twice a year never
- ITE45 95-116
- (Lipsitt Self-Concept Scale)
- V. FEELINGS ABOUT YOURSELF. There are no right and wrong answers. Answer each question in the way that seems best to you. Read each statement as I read it and check the answer that shows how you really feel about yourself, not what others tell you, but what you believe.
- I am friendly 95.
- not very often some of the time most of the time all of the time not at all
   not very of
   some of the s.
- I am happy 96.
- wome of the time most of the time all of the time not very often not at all <del>.</del>...



not at all not very often some of the time most of the time all of the time	

98. I am brave (bold, courageous)

not at all not very often some of the time most of the time all of the time

I am honest (truthful) 99.

not at all	not very often			all of the time
-i. 			;.	

- I am likeable (I am somebody that others like) 100.

11 often the time the time he time
not at a not very some of most of all of t

101. I am trusted (people have faith or confidence in me)

not at all	not very often	some of the tim	most of the tim	all of the time
 	,   	 	; 	s.

- I am good 102.
- not at all not very often some of the time most of the time all of the time

- I am proud 103.
- not at all
   not very often
   some of the time
   nost of the time
   all of the time
  - - I am lazy 104.
- 1. not at all 2. not very often 3. some of the time 4. most of the time 5. all of the time
- I am loyal (faithful, can be depended on) 105.
- 1. not at all 2. not very often 3. some of the time 4. most of the time 5. all of the time

- I am cooperative (I work well with others) 106.
- not at all
   not very often
   some of the time
   most of the time
   all of the time
  - I am cheerful 107.
- not at all
   not very often
   some of the time
   most of the time
   all of the time
- I am thoughtful (I think of others' needs) 108.
- not at all not very often some of the time most of the time all of the time .....
- ; **.** ., | | | |

I am popular (liked by most people) 109.

- not at all not very often some of the time most of the time all of the time -----'n
  - I am courteous 110.

not at all not very often	some of the time most of the time all of the time

I am jealous (envious, hurt because others have some-thing you don't have) 111.

not at all	not very often	some of the time	most of the time	all of the time
	, , 	; . 	; . 	

I am obedient (dutiful, I do as I am told) 112.

not at all not very often some of the time most of the time all of the time	•
	I am polit
	113.

- not at all not very often some of the time most of the time all of the time
  - ÷...
- I am bashful (shy) 114.
- not at all not very often some of the time most of the time all of the time 4 vi

- I am clean 115.
- 1. not at all 2. not very often 3. some of the time 4. most of the time 5. all of the time
- I am helpful (lend a hand, aid) 116.
- - not at all not very often some of the time most of the time all of the time

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APPENDIX C MOTHER SURVEY FORM BASELINE QUESTIONNAIRE<sup>1</sup>

 $<sup>^{1}</sup>$ The questionnaire in this appendix appear as they were used in the study except for the addition of some phrases which name the vairalbes being measured and the source of the scale or items. These phrases are printed in italics (script style).

## BASELINE PHASE

### MOTHER'S SURVEY OF OCCUPATIONAL AND EDUCATIONAL GOALS FOR CHILDREN

. 10		to .
dress or location	Va	
lephone number		
ine of child		
School	Grade	County
alking with the child I. Have you ever talk might have when he	SPIRATIONS AND EXPECTATIONS FOR 1 about (uture job) ed with <u>(name, survey child)</u> abou (she) grows up?	it the kind of job he (she)
Ielking with the child I. Have you ever talk might have when he 	SPIRATIONS AND EXPECTATIONS FOR 1 about future job) ed with <u>(name, survey child)</u> abou (she) grows up? 	It the kind of job he (she
<ul> <li>Ialking with the child</li> <li>I. Have you ever talk might have when he</li> <li>Wccupational Aspiratio</li> <li>2. a. If you could in the survey</li> </ul>	SPIRATIONS AND EXPECTATIONS FOR 1 about (uture job) ed with ( <u>name, survey child</u> ) abou (she) grows up? 	It the kind of job he (she) would you most like ws up?
<pre>ielking with the child i. Have you ever talk might have when he  Weccupational Aspiratio 2. a. If you could (name, survey b. How likely do kind of job?</pre>	SPIRATIONS AND EXPECTATIONS FOR 1 about (uture job) ed with ( <u>name, survey child</u> ) abou (she) grows up? hoose any job, what kind of job <u>child</u> to have when he (she) grou you think it is that <u>(name)</u> will	ut the kind of job he (she, would you most like ws up?
<pre>islking with the child i. Have you ever talk might have when he  Weccupational Aspiratio 2. a. If you could</pre>	SPIRATIONS AND EXPECTATIONS FOR 1 about (uture job) ed with ( <u>name, survey child</u> ) abou (she) grows up? 	would you most like ws up? be able to get that all likely know

3. What kind of job do you think \_\_\_\_\_\_ really will have when he (she) grows up?

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(Talking with child about education)

4. Have you ever talked with <u>(nume)</u> about how far he (she) should go in school? 2. yes, a little -3. no

(Educational Aspirations)

5. (HAND RESPONDENT CARD AND READ WITH HER.) If you had your choice, how far would you like (name) to go in school? \_\_1. 8th grade 2. 1 or 2 years of high school 3. go to a trade school instead of finishing high school 4. finish high school 5. finish high school and go to a trade school 6. 1 or 2 years of college 7. finish college

[Educational Expectations]

- 6. (HAND RESPONDENT CARD AND READ WITH HER.) How far do you think [name] really will go in school? 1. 8th grace 2. 1 or 2 years of high school 3. go to a trade school instead of finishing high school 5. 15th bick school

  - 4. finish high school 5. finish high school and go to a trade school
  - 6. 1 or 2 years of college
  - 7. finish college

NOW, I WILL ASK YOU SOME QUESTIONS ABOUT SOME THINGS YOU DO.

ITEMS 7-15, EXPUSURE TO LARGER SUCIETY

- 7. Does anyone in your family take or read any daily newspapers regularly? \_\_\_\_\_1. yes (name or place published) \_\_\_\_\_ 2. no
- 8. How often does someone in the family listen to a news program on the radio or TV? \_1. every day
  - 2. 2 or 3 times a week
  - **3.** once a week
  - 4. seldom or never
- 9. About how many hours a day, on the average, do you watch TV (all kinds of programs) \_\_\_\_1. none
  - 2. no more than an hour 3. 1 or 2 hours
- (IF ANSWER IS "DON'T KNOW, "ASK: How many programs did you watch yeaterday?)
- 4. 3, 4, or 5 hours 5. more than 5 hours
- 10. How much time does \_\_\_\_\_\_ watch TV on a school day?
  - \_\_\_\_1. none 2. no more than an hour
  - 3. 1 or 2 hours
  - -4. 3, 4, or 5 hours
  - 5. more than 5 hours

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```
11. Do you belong to a church or attend regularly?

1. belong and attend regularly

2. belong but don't attend regularly

3. don't belong but attend regularly

1. belong but attend regularly

3. don't belong but attend regularly
         4. don't belong and don't attend regularly
 12. Are you a member of any clubs or organizations, such as the Homemakers Club, a
       social club, the PTA, a church related organization, etc.
           1. yes, one or more
           2. none
 13. Are you registered to vote?
            1. yes
       _____1. yes
 14. Have you voted in any election or primary during the past two years?
       1. yes
2. no
 15. Do you happen to know who <u>(governor of state)</u> is?

<u>1</u>. correctly identified the governor
           2. did not know
 (HAND RESPONDENT CARD.) This card contains a list of statements that some people agree with and some don't. I'll read each of them over slowly with you, and you tell me if you agree or disagree with it. (DON'T <u>SUGGEST</u> UNDECIDED AS ANSWER.)
215 16, 18, 20, 22, 8 24
Isrole -- Anomia Scale)
 Wother's Anomia or Alienation)
215 17, 19, 21, 23, 25, 16 27
Rosen -- Hother's Achievement Value Orientation)
 16. Nowadays, a person has to live pretty much for today and let tomorrow take
care of itself.
                                              2. disagree
       ____l. agree
 17. All a man should want out of life is steady work that is not too hard with
       enough pay to afford a nice car and home.
                                                                             3. undecided
                                           ____2. disagree
       ____. agree
 18. In spite of what some people say, the life of the average person is getting
       worse, not better.
                                                                              _3. undecided
                                               2. disagree
         1. agree
 19. When a person is born, the success he is going to have is already in the
       cards, so he might just as well accept it and not fight against it.
                                                                           _____3. undecided
                                           ____2. disagree
         ___l. agree
 20. These days a person doesn't really know whom he can count on.
                                                                          _____3. undecided
                                              2. disagree
       ____1. agree
 21. The secret of happiness is not expecting too much out of life and being content
                                                                           ____3. undecided
       with what comes your way.
                                              2. disagree
       ____l. agree
                                                                           MS, S-63, 2-'69, p. 3
```

22.	It's hardly fair to brin for the future. l. agree	g children into the world2. disagree	with the way things look3. undecided
23.	Nothing is worth the sac	rifice of moving away from 2. disagree	n one's parents. 3. undecided
24.	There's little use in wr really interested in the l. agree	iting to public officials problems of the average p 2. disagree	because often they aren't person3. undecided
25.	A good son would try to job in another part of the second	live near his parents even he country. 2. disagree	n if it means giving up a good
26.	Planning only makes a per anyway. l. agree	rson unhappy since your pl 2. disagree	ans hardly ever work out3. undecided
27.	Nowadays with world condi and lets tomorrow take ca l. agree	tions the way they are th re of itself. 2. disagree	e wise person lives for today3. undecided
28.	People like me don't have	much of a chance to be so2. disagree	uccessful in life. 3. undecided
<u>ITEM 29</u> (Kohn	Parental Values Scale)		

(Characteristics of children that mothers value)

29. (HAND RESPONDENT CARD AND READ WITH HER.) This card has sixteen statements.

i am going to read all of them first and then you tell me the three that you think are the most important for a boy (girl) of \_\_\_\_\_'s age?
\_\_\_\_\_\_\_.
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1TEMS 30-31

(Occupation of Parents)

MS, S-63, 2-'69, p. 4

j). a.	What kind of work does your husband do? (GET AS SPECIFIC A DESCRIPTION AS POSSIBLE.) 1. no husband 2. unemployed (DESCRIBE USUAL WORK)
	the former percentent's) occupation is farmer, classify his farm
b.	If the husband's (or respondence) operation as one of the following: 
	<ul> <li>2. Large landowner who supervises some regular paid laborers; farm manager</li> <li>3. Farm operator with one or more regular paid laborer</li> <li>4. Small farm owner-operator with no regular paid laborer;</li> <li>5. Tenant operator with no regular paid laborer; hired foreman</li> <li>6. Sharecropper or regular paid laborer</li> <li>7. Higrant worker, day laborer or squatter</li> </ul>
JI. A.	Do you have a job? 1. no, housewife only 2. yes. How many hours a week? 3. usually work but unemployed now (DESCRIBE USUAL WORK BELOW)
b.	What kind of work do you do? (GET SPECIFIC DESCRIPTION)
<u>34 32-33</u>	
llesiden	ce Status of Parents)
32. a.	Have you ever lived outside this county? 1. yes2. no
b.	If yes, have you lived: (Check all that apply) 1. in an adjoining county? 2. some place else in this state?
	3. in an adjoining state? 4. in another southern state, not adjoining? 5. some place else?
с.	(OMIT FOR URBAN AREAS) Have you ever lived in a city (25,000 or more)?
d.	(OMIT FOR RURAL AREAS) Have you ever lived in the country or in a small town (less than 2,500)? l. yes2. no
33. a.	Has you husband ever lived outside this county? 0. no husband1. yes2. no
b.	If yes, has he lived: (Check all that apply) 1. in an adjoining county?
	2. some place else in this stater
	4. in another southern state, not adjoining?
	5. some place elser MS, S-63, 2-'69, p. 5

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# TEN-YEAR FOLLOW-UP SURVEY OF YOUNG PEOPLE

APPENDIX D

As indicated in the enclosed letter, we want to know what you are doing and planning now, ten years after you first gave us information about yourself. You are part of a sample of over 1,000 young people who grew up in the South. Your answers are important because it is hoped that this information will help young people take better advantage of their educational and job opportunities.



• Agricultural Experiment Stations in these Southern states and universities: ALABAHA--Alabama A & H University, Normal • KENTUCKY--University of Kentucky, Lexington • HISSISSIPPI--Alcorn State University, Lorman • NORTH CAROLINA--University of North Carolina at Greensboro • North Carolina State University, Raleigh • SOUTH CAROLINA--Winthrop College, Rock Hill • TENNESSEE--University of Tennessee, Knoxville • VIRGINIA--Virginia Polytechnic Institute & State University, Blacksburg • USDA / SEA, Cooperative Research, Washington, DC • • 146

TEN-YEAR FOLLOW-UP SURVEY OF YOUNG PEOPLE

CASE CODE	CDUNTY 1969 5CHOOL
YOUR PRESENT SITUATION	
1. Do you now live in the country, in a town, or in a	city7
1. In the open country or a small town (unde	r 10,000 people)
2. In a big town or small city (10,000-49,99	9 people)
3. In a big city or its suburbs (50,000 and	up)
4. In the country near a big city or its sub	ourbs (50,000 and up)
<ol> <li>How close are you living now to where you were livi were growing up and yoing to school?</li> </ol>	ng when you
1. In the same community or very near	
2. In the same state, but a different commun	hity
3. In a nearby state	
4. In a different part of the USA	
3. With whom do you now live?	
1. By myself (or by myself with children)	
2. With my parents	
3. With my husband or wife	
4. With parents and husband or wife	
5. With other relatives	
6. With person(s) not related to me (in hous rooming	e, apartment house, dormitory, house, the Armed Forces, etc.)
4. Are you presently1. Single (never married)	
2. Married	
3. Divorced or separated	
4. Widowed	
5. When were you (first) married?	
MonthYear	
How old were you?	
Check (√) here if never married.	
6. How many children do you have?	SSF S-63/S-126 Follow-up, 1979, p. 1

7. What were you doing in each of the years since 19757

If you were doing more than one thing during the year, check |V| as many boxes as apply. You may wish to start with 1975 and read down the list of items, checking each one you were doing that year. Then yo to the next year.

Now many of these things were you doing	l In 19757	In 19767	In 19777	In 19787	Now 19797
B. Going to high school or graduating					
b. Working in a full-time or part-time job or self-employed					
c. Enrolled in graduate or professional school					
d. Taking academic courses at a two- or four- year college					
:. Taking vocational or technical course(s) at any kind of school or college (for example, trade, vocational, business, correspondence course, or other career training)		,			
. On active duty in the Armed Forces (or service academy)					
). Homemaker / Housewife					
. Unemployed, temporary layoff from work, looking for work, or waiting to report to work					
. Working without pay (for parents, relatives, or others)					
. Something else (tell what)			{		

8. Now, what have been your job experiences? Please give the name of the job or type of work you had during each of the following years. (Please write in "same" if the job was the same as the year before. If you had no regular job, please write "none".)

1975 _		
1976		
1977		
1978		
Present	now), 1979	

9. During last year (1978), how many weeks of the 52 were you without work because you couldn't find a job or were laid off?

	wecks
--	-------

- 10. If you were unemployed during 1978, what was the main reason? Check (/) one.
  - 1. The job I had was discontinued.
  - \_\_\_\_2. I was fired.
  - \_\_\_\_\_3. I quit my job to look for a better job.
  - 4. I quit because I didn't like the job I had.
  - 5. I quit for personal or family reasons.
  - 6. I quit for other reasons.
  - \_\_\_\_7. I did not find work when school ended.
  - 8. I've never had a regular job.
- 11. Check (\*) the category that best describes the amount of money you are making (before tax and other deductions). If married, also check the category that best describes the amount of money your husband or wife makes (before tax and other deductions).

SELF	HUSBAND OR WIFE	
		1. Hone
		2. Less than \$300 per month (less than \$75 per week)
		3. \$300-\$499 per month (\$75-\$124 per week)
		4. \$500-\$699 per month (\$125-\$174 per weck)
		5. \$700-\$999 per month (\$175-\$249 per week)
		6. \$1000-\$1499 per month (\$250-\$374 per week)
	1	7. \$1500 or more per month (\$375 or more per week)

- 12. Check ( $\checkmark$ ) all of the <u>sources</u> from which you are now getting money. (If married, answer for self and husband or wile.)
  - 1. Salary or wages from employment or work
  - 2. Profit or fees from operating a farm, business or profession
  - 3. Rents from property owned or interest on savings and investments
  - \_\_\_\_4. Honey from parents or relatives
  - 5. Social Security or other pensions
  - \_\_\_\_6. Government welfare (food stamps, Aid to Dependent Children, etc.)
  - \_\_\_\_7. Unemployment compensation
  - \_\_\_\_8. Gifts or private relief (scholarships, fellowships, or other financial aid for schooling)
  - \_\_\_\_9. Other (tell what) \_\_\_\_\_

- 13. Now, read the list again in question #12 and CIRCLE the source from which you get the <u>most</u> money.
- 14. How often did you use the following methods in looking for or getting the jobs you have held since the beginning of 19757 Check ( $\prime$ ) all that apply.

Hethod	Often Used	Sometimes Used	llever Used
a. State employment office			
b. Private employment agency			
c. Community action or welfare groups			
d. Newspaper, TV, or radio ads			
e. Telephoned or went around on my own to places where there might be a job (without knowing whether or not one was available)			
f. Employer asked me to work			
g. Registration with a union			
h. Parents or relatives			
1. Frlends			
j. Teachers or school counselors			
k. School or college placement service			
I. Applied for a government job (federal, state, or local)			
m. Applied to a military service (Army, Navy, etc.)			
o. Other (tell what)			
	1	1	

Check here if the question does not apply to you.

15. How much have the following things kept you from getting the JOBS you really wanted? Check (/) one box after each reason.

	Very Much	·Some	Very Little
a. Not enough money to go to vocational/ technical school or college			
b. Lack of information about jobs			
c. Hy race			
d. Hy sex			
e. Didn't want to move away from friends or family			
f. Not smart enough			
g. The schools I have gone to			
h. Lack of good job opportunities where I grew up			
<ol> <li>Lack of chance to develop leadership qualities when I was growing up</li> </ol>			
j. Lack of parents' interest and encouragement			
k. Good jobs are getting too scarce in the USA			
I. No vocational/technical school or college nearby			
m. Didn't know the right people			
n. The effort or work it would have taken to find the right job			
o. Family responsibilities			
p. Something else (tell what it is)			
L			J

Check here if the question does not apply to you.

- 1. left before finishing 8th grade
- 2. finished 8th grade
- \_\_\_\_\_3. finished 8th grade and went to a trade or vocational/technical school
- 4. some high school
- 5. finished high school

6. finished high school and went to a trade or vocational/ technical school or business college

\_\_\_\_\_7. started college but have not finished

- \_\_\_\_\_8. finished junior or community college (2 years)
- \_\_\_\_9. finished college (4 years)
- \_\_\_\_\_O. went beyond college (graduate or professional school)

17. Are you still in school?

\_\_\_\_1. no \_\_\_\_2. yes

18. List all the education or training you have had in addition to that above (such as short courses, on-the-job training, etc.).

<sup>16.</sup> How far have you gone in school?

We've been asking you about satisfaction with jobs, education, etc. Now we'd like to ask how you feel about your life as a whole.

32. Below is a picture of a ladder. Suppose we say that the top of the ladder represents the best possible life for you, and the bottom represents the worst possible life for you. Think for a minute about what would be the best possible life and the worst possible life for you personally. Considering the things you've thought about, where on the ladder would you place yourself In the past, the present, and in the future? Answer cach question shown below. BEST POSSIBLE LIFE a. At what step on the ladder would you FOR YOU say you are at the present time? 9 STEP NUMBER 8 b. At what step on the ladder would you say you were five (5) years ago? 7 STEP NUMBER 6 c. At what step on the ladder do you 5 think you will be five (5) years from now? 4 STEP NUMBER 3 2 WORST POSSIBLE LIFE FOR YOU YOUR GOALS FOR THE FUTURE 33. If you could choose any job you wanted, what kind of <u>job</u> would you <u>really like to have</u> in the future? (Describe clearly what you would do.) 34. What kind of job do you think you really will have in the future? (Describe clearly what you would do.)

- 35. Looking into the future, which of the following statements best describes how much additional education and training you would really like to have?
  - \_\_\_\_l. go to a trade or vocational/technical school
  - 2. finish high school
  - \_\_\_\_\_3. finish high school and go to a trade or vocational/technical school or business college
  - 4. finish high school and go to college
  - \_\_\_\_5. finish college (4 years)
  - \_\_\_\_6. go beyond college (graduate or professional school)
  - \_\_\_\_7. take short courses or training
  - 8. don't really want any further education or training
- 36. Looking into the future, which of the following statements best describes how much additional education and training you think you really will get?
  - 1. go to a trade or vocational/technical school
  - 2. finish high school
  - \_\_\_\_\_3. finish high school <u>and</u> go to a trade or vocational/technical school <u>or</u> business college
  - 4. finish high school and go to college
  - \_\_\_\_5. finish college (4 years)
  - \_\_\_\_6. go beyond college (graduate or professional school)
  - \_\_\_\_7. take short courses or training
  - 8. don't think I will get any further education or training

#### 37. Whose advice is most helpful to you?

Check (✓) <u>all</u> who are important for advice <u>about jobs or education</u>	Check (/) <u>all</u> who are important for advice about <u>personal or family matters</u>
l. wife or husband	l. wife or husband
2. boyfriend or girlfriend	2. boyfriend or girlfriend
3. mother	3. mother
4. father	4. father
5. brother or sister	5. brother or sister
6. other relative	6. other relative
7. friends	7. friends
8. teacher or counselor	8. teacher or counselor
9. someone else	9. someone else
	p. 14

APPENDIX E

RESPONDENT TRACKING PROCEDURES<sup>1</sup>

 $<sup>^{1}\</sup>mbox{See}$  Turner (1983) and Shoffner (1980) for a detailed description of respondent tracking procedures.

## **Respondent Tracking Procedure**

In the 1979 10-year follow-up, tracking procedures initially were based on mail questionnaire. The procedure for locating respondents relied on address maintenance. Telephone contact was utilized for non-respondents. From the 1975 survey, addresses were recorded for respondents, along with parents' full name and home phone numbers. Prior to the 1979 mailing, respondents were sent a newsletter with postcard for name and address correction and/or а The initial newsletter included a post card verification. personalized with the subject's and was name being handwritten. The researchs' location where the subject was to return the post card was on the front flap of the newsletter. The newsletter contained information as to the history of subject contact, some findings from the initial phase of the study and the request for verification of present address and phone number.

Following the mail procedure, local contacts in the communities used to locate the "hard find were to individuals" and attempts were made to secure a completed questionnaire. Local contacts in the survey areas attempted to verify current addresses through school personnel and records, old classmates, the post office, telephone office, voting records, and local churches. In one state radio announcements were attempted in an effort to locate nonrespondents.

Once the respondent was located, a letter on University letter-head hand signed by the researcher, and a questionnaire booklet were mailed to the subject. Following the sending of the questionnaire booklet, a mail reminder postcard was sent. In the last phase of the follow-up procedure, local interviewers telephoned the respondents to ascertain if the questionnaire had been received and then encouraged completion of the questionnaire. APPENDIX F

**RESULTS OF ANLAYSIS** 

Table 1. Zero-Order Correlation, Means and Standard Deviations of Variables

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		31
A	<u>36983838888888888888</u>	33
H 4	886886888888888888888888888888888888888	8.18 1.1 1.1
	<u>19499999999999999999999999999999999999</u>	1.1
R		- 
A		
8		73
•		

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Achievemen	nt motivation	Ed. attainment	Occ. attainment
Occ. asp. Occ. asp. Occ. asp. Occ. asp. Occ. asp.	1969+1975+1979 1975+1979 1969 1975 1975 1979	.242 (524) .235 (524) .124 (524) .356 (466) .317 (433)	.273 (385) .295 (385) .118 (372) .370 (333) .363 (318)
Occ. exp. Occ. exp. Occ. exp. Occ. exp. Occ. exp.	1969+1975+1979 1975+1979 1969 1975 1979	.289 (524) .308 (524) .124 (524) .382 (466) .479 (369)	.332 (385) .363 (385) .118 (372) .313 (333) . <u>586</u> (286)
Ed. asp. Ed. asp. Ed. asp. Ed. asp. Ed. asp.	1969+1975+1979 1975+1979 1969 1975 1979	.398 (524) .434 (524) .168 (524) .482 (466) .363 (525)	.276 (385) .268 (385) .140 (372) .141 (333) .223 (374)
Ed. exp. Ed. exp. Ed. exp. Ed. exp. Ed. exp.	1969+1975+1979 1975+1979 1969 1975 1979	.502 (524) .552 (524) .185 (524) . <u>629</u> (466) .424 (518)	.277 (385) .296 (385) .120 (372) .234 (333) .209 (368)
Occ. asp.a Ed. asp	& exp.+ . & exp. 1969	.117 (524)	.079 (385)
Occ. asp. Ed. asp	& exp. + . & exp. 1975	.264 (524)	.264 (385)
Occ. asp. Ed. asp	& exp. + . & exp. 1979	.218 (524)	.279 (385)

Table 2. Correlational matrix between youth achievement motivations and educational and occupational attainment

All correlation coefficients are significant at p < .001 except \*

Numbers in parentheses mean number of valid cases.

Underlined numbers indicate the independent variables that are most highly related to the dependent variables.

			Indi	rect Effects Th	rough			
	R <sup>2</sup>	Child's Cha U R <sup>2</sup> Change	racteristics Instandardized Beta	Standardized Beta	Signif R <sup>2</sup>	<u>1cant Other</u> R <sup>2</sup> Change	<pre>s Influence (In Unstandard1zed Beta</pre>	iside the Family) Standardized Beta
Race	.059	•059	9.89*	•23 <sup>*</sup>	• 004	• 004	-2.88 (NS)	-•04 (NS)
Sex	.122	.063	0.35*	•25 <sup>#</sup>	•0046	•0006	08 (NS)	(SN) 100°-
Family Background	.198	.076	•24 <sup>*</sup>	•28 <sup>*</sup>	.0566	.052	• 30*	.24 <sup>*</sup> (.24) <sup>3</sup>
Child's Characteristics					.1146	. 058	•28 <sup>*</sup>	.19 <sup>*</sup> (.24) <sup>a</sup>
	Ovei	call F (3,274)	- 22.56 R <sup>2</sup> -	.20(.19)	Ó	verall F (4,	273) = 8.82 <sup>*</sup>	R <sup>2</sup> = .11(.10)

\* a < .05

NS - not significant

<sup>a</sup>Again, as in Table 10 and 11, the values in parentheses represents the path coefficients after removing non-significant variables from the regression equation. Overall F(1,276) = 16.97, R<sup>2</sup> = .06(.05) for significant other's influence.

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Table 3. Indirect Effects of Selected Independent Variables on Occupational Attainment

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