DOCUMENT RESUME

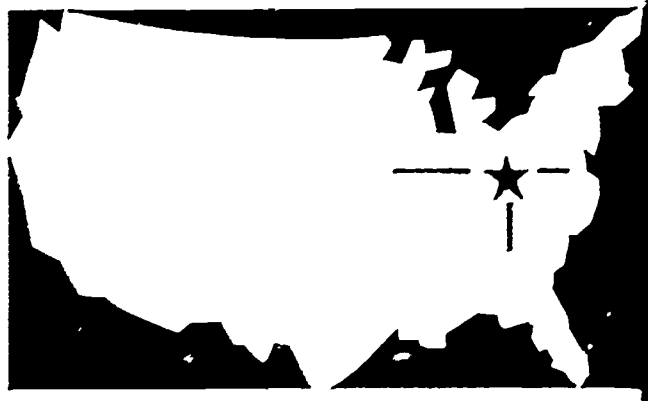
ED 032 427 08 VT 009 265

By-Campbell, Robert E.; And Others
Vocational Development of Disadvantaged Junior High School Students. Final Report. Research Series No. 41.
Ohio State Univ., Columbus. Center for Vocational and Technical Education.
Spons Agency-Office of Education (DHEW), Washington, D.C. Bureau of Research.
Bureau No-BR-7-0158
Pub Date Aug 69
Grant-OEG-3-7-00158-2037
Note-91p.
Available from-Ohio State Univ., Columbus. Center for Vocational and Technical Education, 1900 Kenny Road, 43210 ($2.00)
EDRS Price MF-$0.50 HC-$4.65
Descriptors-Academic Aspiration, Bibliographies, Community Characteristics, Disadvantaged Schools, *Disadvantaged Youth, Dropout Prevention, *Junior High School Students, Occupational Aspiration, Relevance (Education), *Self Concept, Student Characteristics, *Student Interests, Student School Relationship, *Vocational Development

A total of 2,370 students from four different regions of the United States participated in a study to explore the educational and vocational perceptions and expectations of disadvantaged junior high school students. One school serving primarily disadvantaged students and one serving nondisadvantaged students from each of the four school districts with enrollments ranging from 50,000 to 100,000 students participated in the study. A sample of students who could read at fifth grade level or higher completed a series of inventories which measured their perceptions and expectations toward school, work, family, peers, and self. Additional information was collected relating to disadvantagement, personal plans and background, the community and the school. Major findings were: (1) Socioeconomic disadvantagement is relevant to the community context, (2) The differences between disadvantaged and nondisadvantaged students did not appear as frequently as might have been expected, (3) Educational aspirations of disadvantaged students were generally lower than those of nondisadvantaged students, and (4) Disadvantaged students reported giving more thought to school plans and future jobs, viewed teachers in a more favorable light, and reported that school was easier. The data appears in 20 appendixes. A 49-item reference list is cited. (DM)

VOCATIONAL DEVELOPMENT OF DISADVANTAGED JUNIOR HIGH SCHOOL STUDENTS

THE CENTER FOR VOCATIONA
AND TECHNICAL EDUCATIO



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The Center for Vocational and Technical Education has been established as an independent unit on The Ohio State University campus with a grant from the Division of Comprehensive and Vocational Education Research, U. S. Office of Education. It serves a catalytic role in establishing consortia to focus on relevant problems in vocational and technical education. The Center is comprehensive in its commitment and responsibility, multidisciplinary in its approach, and interinstitutional in its program.

The major objectives of The Center follow:

1. To provide continuing reappraisal of the role and function of vocational and technical education in our democratic society;

2. To stimulate and strengthen state, regional, and national programs of applied research and development directed toward the solution of pressing problems in vocational and technical education;

3. To encourage the development of research to improve vocational and technical education in institutions of higher education and other appropriate settings;

4. To conduct research studies directed toward the development of new knowledge and new applications of existing knowledge in vocational and technical education;

5. To upgrade vocational education leadership (state supervisors, teacher educators, research specialists, and others) through an advanced study and inservice education program;

6. To provide a national information retrieval, storage, and dissemination system for vocational and technical education linked with the Educational Resources Information Center located in the U. S. Office of Education.

RESEARCH SERIES NO. 41

FINAL REPORT
ON A PROJECT CONDUCTED UNDER
PROJECT NO. 7-0158
GRANT NO. OEG-3-7-00158-2037

VOCATIONAL DEVELOPMENT OF DISADVANTAGED JUNIOR HIGH SCHOOL STUDENTS

Robert E. Campbell
Jean L. Parsons
Samuel H. Osipow
Frank M. Fletcher
Chandra M. N. Mehrotra

AUGUST 1969

The Center for Vocational and Technical Education
The Ohio State University
1900 Kenny Road
Columbus, Ohio 43210

U. S. Department of
Health, Education and Welfare

Office of Education
Bureau of Research

PREFACE

Achieving orderly and meaningful vocational development is critical for all members of our society since the role of work constitutes a major portion of an individual's life. For some there are relatively few problems, whereas others experience considerable frustration, obstacles and handicaps. Although national concern is focused on helping all individuals achieve vocational growth, special attention is needed for those individuals who are handicapped by various kinds of disadvantages. Hence, this study grew out of The Center's concern for helping the educationally disadvantaged, which represents one of The Center's major program thrusts.

This publication reports the findings of a study which explored the vocational development of disadvantaged and nondisadvantaged junior high school students. The study was designed to examine the relationships among student's perceptions of their community environment, academic curriculum, individual characteristics, readiness for vocational planning, and vocational maturity. The findings should be useful to local school districts in developing relevant curricular and guidance programs for the junior high school student. The report should be especially helpful for those who are involved with disadvantaged students since the findings alert us to unique considerations in educational planning for these students.

We would like to acknowledge the approximately 3,000 students, faculty, and staff from the four metropolitan school districts who gave us outstanding cooperation in collecting the data. We are indebted to them for their help. Special recognition is due to the project staff consisting of Robert E. Campbell, Jean L. Parsons (now at the University of Kansas), Samual H. Osipow, Frank M. Fletcher, and Chandra M. N. Mehrotra (now with the Educational Testing Service, Evanston, Illinois).

We would also like to express appreciation to a number of people who have helped in a variety of ways; this group included Donald F. Eggeman; Miller S. Makey; Frank Fletcher, III; Jatinder Pal; Ethel Holder; Michael Donovan; and Carol Baker. Finally, we would like to pay special tribute to Norman C. Gysbers, Thoman L. Hilton, and Edward J. Morrison for their review and editing of the final manuscript.

Robert E. Taylor, *Director*
The Center for Vocational
and Technical Education

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SUMMARY

The primary objective of this study was to explore the educational-vocational perceptions and expectations of disadvantaged junior high school students. A total of 2370 seventh and ninth grade students from four school districts participated in the study. Each school district represented a different region of the United States and had enrollments from 50,000 to 100,000 students. In each school district, two schools provided respondents, one serving primarily disadvantaged students and the other nondisadvantaged students determined by socio-economic criteria. The nondisadvantaged students were included to provide comparative data. The criteria for designating a school serving predominantly disadvantaged students consisted of the following: 1) served low income families, 2) served family having poor housing, 3) served families in which parents have low educational attainment, and 4) was located in an area with a high unemployment rate and high underemployment.

Students completed a series of inventories which measured their perceptions and expectations toward school, work, family, peers, and self as related to their vocational development. Additional information was collected from students and faculty pertaining to "disadvantagement," personal plans and background, the community and the school.

Detailed findings were reported in 28 tables. The tables provided data on educational-vocational planning, vocational maturity, and the perceptions of school and family as they relate to vocational aspirations. A condensation of the major findings are as follows:

Community differences. Being socioeconomically disadvantaged is relevant to the individual's community context and it is a mistake to generalize a state of disadvantagement in terms of absolute criteria across communities. A person sees himself relative to the world of his local community. In this study, students who were designated by school officials as being disadvantaged in one community were not so in another based upon socioeconomic criteria. Hence, each community represents a unique demographic "case study" in classifying students for disadvantagement. The present study attempted to control for this community variance by initially treating each community separately, but at the same time employing general criteria common to all communities. It is recommended that future research on the problems of the disadvantaged allow for the unique community variable by first conducting a local demographic survey about the nature of local implications for disadvantagement.

Disadvantaged versus nondisadvantaged students. While certain important differences between disadvantaged and nondisadvangaged students were observed, the differences did not appear as frequently as might have been expected. For example, disadvantaged students' educational aspirations were generally lower than those of nondisadvantaged students, but a large majority of students from both groups aspired to high school graduation as a minimum level of education. Disadvantaged students reported giving more thought to school plans, their future job, viewed teachers in a more favorable light, and reported that school was easier than did nondisadvantaged students. The two groups were similar in many respects, e. g., perception of the amount of freedom possessed in occupational choice, and their report of the adequacy of family-child relationships and generally on the face of the findings, the two groups appeared to be very similar at this educational level.

The findings are encouraging in that the disadvantaged student sees the school as an opportunity to prepare for a productive and satisfying life despite previously acquired socioeconomic handicaps. The disadvantaged student's positive expectation from the school emphasizes a clearcut challenge to our educational system to insure that our schools do not disappoint him. It further serves as a mandate that the schools provide curriculum which is dynamic and relevant to the vocational aspirations of the student. Evidence from other studies suggest that the junior high school years might be the most critical educational level for reaching students. Negative educational experiences at this age are often the antecedents for subsequent alienation and eventual dropouts.

VOCATIONAL DEVELOPMENT OF DISADVANTAGED JUNIOR HIGH SCHOOL STUDENTS

CHAPTER I

INTRODUCTION

The role of work in our society constitutes a major portion of an individual's life. Becoming prepared to enter the world of work is often described as a process of educational-vocational development. There are a number of complex influences which impinge upon the individual as he experiences this process. Such influences as the home, family, school, peer group, and the community, to name a few, are major determinants in ultimately influencing the individual's vocational development. In our society, educational-vocational development is unique in many respects from other societies and is individually prized. Perhaps the prizing of this process is reflected very meaningfully in a quote from former U. S. Secretary of Health, Education and Welfare, John W. Gardner (1966) as follows:

> Everything that we do, all that we achieve, must finally be measured in terms of its effect on the individual. We set out to create a society in which the individual can flourish. But our highly organized society carries its own threats to individuality.
>
> We can avert that threat. We can't escape size and complexity today, but we can design our institutions so that they serve the individual as well as the system. Our goal should be a society designed for people (p. 40).

Achieving orderly and satisfactory vocational development varies with the individual. For some, there are relatively few problems whereas for others there is considerable frustration, obstacles, and dissatisfaction. In addition to the value for the individual, orderly vocational development is also important for our national manpower requirements.

The importance of vocational development is further magnified in our society by sheer numbers. The U. S. Department of Labor estimates that there will be approximately 26,000,000 new youthful workers during the decade of the 1960's. This represents an increase of almost 50 percent over the 1950's (Wolfein, 1964). For our country to continue to thrive economically and socially, it is essential that there be a balance of manpower utilization as has been pointed out by the National Manpower Council (1960), and the U. S. Department of Labor Manpower Report to the President (1967).

The general focus of this study was to explore the educational-vocational perceptions and expectations of disadvantaged junior high school students as these perceptions relate to the students' educational-vocational development, and to compare their perceptions with a group of nondisadvantaged junior high school students. The following discussion will summarize the professional literature most directly relevant to the general purpose of the study, viz., vocational development, junior high school, and the educationally disadvantaged.

VOCATIONAL DEVELOPMENT

The educational-vocational development process has been the subject of concern for a number of investigators (Holland, 1966; Roe, 1956; Super, 1957; Tiedeman, 1963; and many others). These investigators have been increasingly interested in the vocational development of the individual and have investigated various aspects of this problem, e. g., occupational choice, personality factors influencing vocational behavior, self-concept, role models, interests, attitudes, etc.

Attempts at a theoretical conceptualization of the educational-vocational developmental process have relied heavily on studies of human development. Although the concepts of human development and early childhood experience cut across most theories, theorists have differed in their emphasis on the importance of different developmental states and antecedents (Osipow, 1968). For example, Holland (1959, 1966) has proposed a typology model of vocational choice of six personality types and vocational environments; he suggests that a person "searches" for those environments which are congruent with his personal orientations. Crites (1964), Gonyea (1961), Roe (1957, 1964), Super (1957), and Tiedeman (1961, 1963) have stressed the importance of identifying and describing developmental stages of vocational development. The theorists differ, primarily, in terms of what, how and when developmental influences occur. Gross (1958), Havighurst (1964), and Miller and Form (1951) have contributed theoretical statements which have emphasized the socio-psychological developmental process. Havighurst's stages of vocational development places more weight on the individual's identification as a "worker" in the occupational structure and society than other theorists.

Perhaps the work of Roe (1964), Super, Starishevsky, Matlin, and Jordaan (1963) and Havighurst (1964) are most directly relevant to understanding the present study. Super *et al.* described a series of vocational developmental tasks which could be translated into specific activities for the adolescent in reaching vocational maturity, e.g., between the ages of 14 and 18 the adolescent is confronted with the task of crystallizing a vocational preference while between 18 and 21 the task of specifying a vocational preference. Super's research, as well as that of others, indicates that these activities have validity, suggesting that the concept of the vocational developmental task can help provide direction for educational programming.

The emphasis on the importance of early childhood antecedents described by Roe is valuable to understand the long-range developmental influences in the vocational-educational process. Havighurst alerts us to the broader sociological variables which come into play with the

socio-psychological development of the individual as he attempts to achieve occupational identity and productivity. The unique contributions of these theorists together provide educational direction and perspective for this study. The professional literature suggests the individual vocational development represents a cumulative multivariable process incorporating societal, familial, and individual factors. Individuals vary as to their unique combination of these factors, e.g., personality, ability, family, socioeconomic status, and educational opportunities, and the manner in which they integrate these factors in manifesting their vocational direction.

JUNIOR HIGH SCHOOL

Havighurst (1964) Thomas (1956) Venn (1964) and the U. S. Panel of Consultants on Vocational Education (1963) have been especially concerned with the role of education in the educational-vocational developmental process. Thomas (1966), for example, has stated "all of the important formulations of education's social goals in this century have mentioned explicitly the schools' responsibility for some kind of vocational education." Similarly, Havighurst (1964) has noted that one of the functions which may properly be expected of the educational system is helping students with appropriate abilities and attitudes get into occupations where they are most likely to find ego-involving jobs. Americans have long held the ideal of education for every individual. Programs designed to prepare the student for work are many and varied. The traditional areas of vocational education such as business, distributive education, trade and industrial education, home economics, and agricultural education continue to prepare students for work. These programs in vocational education generally begin in secondary school.

Historically, junior high school has represented a unique educational developmental period, as suggested by Popper in his book, *The American Middle School*, (1967). Popper has pointed out that the shift from two major units (elementary and high school) to three elementary, junior high and high school that occurred in 1910 as a reflection of the adolescence as a distinctive maturational period characterized by transition which requires special educational treatment.

Erikson (1963) has proposed a theory of human development that is relevant for the understanding of junior high school students and the personality aspects of career development. Erikson suggested a series of five psychological stages for the development of the individual; his theoretical discussion of the junior high school years has implications for the central focus of this study. He sees the junior high school years as the beginning of developing more specific identity which in turn influences vocational identity and subsequent development. He further postulates and emphasized the relationship between personality development and the capacity to work.

Super and Overstreet (1960) have also emphasized the importance of the junior high school years and the relevance of this stage to vocational maturity as part of longitudinal vocational development. They concluded:

> Vocational maturity in the ninth grade, as assessed by our measures, was defined by the findings as behavior in preparation for vocational choice, as planning and looking ahead. The lack of significant intercorrelation among the Consistency, Crystallization, Independence of Work Experience, and Wisdom indices led to the conclusion that, in grade nine, vocational maturity is not characterizable as goal-attainment, as the having of consistent, realistic perferences, nor as having begun to make a place for oneself in the world of work.

Thus, it can be seen that in our educational system the junior high school years, and especially the ninth grade, constitute a critical period in which to begin the establishment of one's educational-vocational career fate and vocational identity.

Although the career choice process is not irreversible in junior high school, those years are clearly a time of significance and have major consequences for the student's future plans. Since most students must make some kind of an educational decision concerning their plans for senior high school, i.e., as to which type of secondary school program they are going to follow (vocational, college preparatory, and/or general-academic), being well informed as a decision maker is crucial. This is not to suggest that this choice point is irreversible nor that a student cannot change his educational-vocational options at a later time. Katz (1963), in pointing out that 8th and 9th grade educational decisions represent the first major choice point in our school system, has described a variety of choice mistakes commonly made at that time and ways educators can assist students to develop sound decision-making skills. He concludes by saying that guidance at the 8th or 9th grade can concentrate on a career-oriented decision (this is high school curriculum choice) but without premature and unrealistic pressure to settle on a specific occupational preference. Thus, junior high school is not only a vocational choice point but also a stage of vocational exploration.

THE EDUCATIONALLY DISADVANTAGED

For those who go through the educational-vocational developmental process experiencing deprivations and handicaps, there could be a serious disruption to individual happiness as well as serious loss to society in terms of manpower potential. These handicaps and deprivations can encompass a wide spectrum of disadvantages, e.g., educational, social, economic, physical, intellectual, and psychological. These disadvantages can be crucial obstacles in achieving an orderly educational-vocational development. Our society has been so much concerned with this segment of our population, (the disadvantaged) that the authors of the Vocational Education Act of 1963 saw fit to emphasize this in Section 4 (c) of that act which says ". . .to meet the special vocational needs of youth, particularly used in economically depressed communities, who have academic, socioeconomic, or other handicaps that prevent them from succeeding in a regular vocational education program."

A number of social scientists and educators have investigated the problems of disadvantaged youth and have emphasized the importance

of helping them especially concerning educational-vocational development (Dentler, 1965; Miller, 1965; Schreiber, Kaplan, and Strom, 1965; the National White House Conference on Education of the Disadvantaged, 1966). It has been generally concluded that the disadvantaged have unique problems and we know very little about their problems and how to help them.

During the present decade the topic of the education of the disadvantaged has been discussed in hundreds of articles, both popular and scholarly, and in books ranging from Harrington's *The Other America* (1962), often credited with having sparked the "War on Poverty," to Passow's *Education in Depressed Areas* (1963), a collection of research studies and theoretical essays written by many of the outstanding scholars in the field.

There are many terms used to describe populations of a disadvantaged nature. Hess (in press) has written:

> To be disadvantaged is by definition a relative condition. We are probably all disadvantaged in some way in relation to some other person or group. As is often the case with terms used to designate social categories, the word is a euphemism, intended to conceal some of the underlying connotations it carries. As it is now being used in the field of education, it refers to a number of groups which have been in previous times called by other names--"deprived," "lower class," "underprivileged," or simply "poor." It is obviously not a precise term. It reflects inversely, the general lines of prestige and privilege in the society. The essential point of the concept of disadvantaged groups is that there are social, cultural, and economic circumstances which act systematically (that is, predictably and consistently) to prevent children in certain places and with certain characteristics from obtaining adequate education, income, and dignity. In this sense, disadvantaged is a group phenomena. In a more accurate usage, however, disadvantaged may refer to any condition which prevents an individual from being educated to the maximum of his genetic potential.

Hess also has indicated the utility of distinguishing between disadvantaged which is occasioned by social and cultural discrimination and disadvantaged which is geographical in origin--as in the lack of adequate schools for children in rural and isolated regions.

Frank Riessman in his book, *The Culturally Deprived Child* (1962), used the following terms interchangeably: culturally deprived, educationally deprived, deprived, underprivileged, disadvantaged, lower class, lower socioeconomic group.

General characteristics of the disadvantaged group as listed by Crow, Murray, and Smythe (1966), include 1) low annual income, 2) high rate of unemployment, 3) underutilization of human resources, 4) poor housing, 5) poor sanitary conditions, 6) large families with inadequate living space, 7) excessive reliance on welfare, 8) inadequate education, and 9) attitudes of hopelessness.

Writers have emphasized various characteristics in describing the disadvantaged. Riessman (1962) proposed a "cultural approach" to the understanding of this group. He distinguishes between the culture, traditions, values, attitudes, and mores; and the environment, the physical conditions of life such as housing. According to Riessman, the attitudes and values of the underprivileged are what is relevant and important for educators to understand.

Another way of discussing these characteristics is to consider the home environment and family status of the disadvantaged group. Gordon (1965) has reviewed the work in this area and concludes that the studies are limited in scope, but do suggest the importance of these variables. He indicates the need for studies which go beyond the enumeration and description of environmental factors, and which study the relationship between certain features of the environment and certain behavioral characteristics.

The environemtnal characteristics discussed widely include broken homes and absence of the father, overcrowded conditions, authoritarian approach to parent-child relationship, less verbal interaction among family members, and fewer books and magazines available. The physical conditions which frequently lead to health problems, are also well-known: poor housing, inadequate sanitary facilities, inadequate food and clothing.

Motivational characteristics have also been discussed as associated with the disadvantaged. Crow, *et al.* (1966), emphasizing the distinction between intrinsic and extrinsic motivation have suggested that the most effective strategy to be followed in educating the culturally disadvantaged child rests on the fostering of an intrinsic desire for learning.

Gordon (1965) concluded that attitudinal factors are closely related to motivational factors and are not infrequently the source of problems in educational planning for disadvantaged children. Hieronymus (1951) found that high levels of aspiration and positive attitudes toward school were more frequently encountered in middle and upper class children than in lower socioeconomic groups. On the other hand, Soares and Soares (1968) found no substantial differences in the self-perception of disadvantaged and nondisadvantaged youngsters.

Language, cognition, and intellectual development are also emphasized in the presentation of the characteristics of the disadvantaged. Deutsch (1964) found that lower class children were less able to conceptualize abstractly; McCandless (1952) found that socially disadvantaged children tended to be more concrete and inflexible in their intellectual functioning. Gordon (1965) reviewing a great many studies on the relationship of intelligence and socio-economic status, concluded that there is no scientifically acceptable evidence to indicate that ethnic groups differ in innate ability. The work of Hunt (1961) has clearly developed the position that intelligence is a function which develops in and through the process of interaction with the environment.

In defining the term disadvantaged, it is important to note the confusion regarding the nature of the characteristics of being

disadvantaged as opposed to the nature of the causes of being disadvantaged. As Gordon (1965, p. 385) notes "to establish the fact of correlation between certain conditions and poor school adjustment or certain characteristics and underdevelopment is not to establish the fact of causation."

Finally, one must note the obvious fact that individual differences exist within this group as within others. There is no typical disadvantaged student, but a wide variety of disadvantaged students with widely varying characteristics. For the purposes of this study the following types of handicaps are defined:

a. Educationally handicapped students--students with such problems as reading and conceptual disabilities, poor work and study habits, negative attitudes, and alienation from school. In view of the recent discussions of the importance of experience for the development of intellectual functioning such as (Hunt, 1961), intellectual disabilities are also included here.

b. Socially handicapped students--students who have experienced social deprivations due to ethnic group assimilation, "slum" cultural experience, minority group discrimination, and non-English speaking environment.

c. Economically handicapped students--students who come from families who do not have sufficient funds to satisfy their basic needs of food, clothing, sanitary and adequate shelter, and health requirement.

d. Physically handicapped students--students with physical disabilities which will limit their choices of work.

e. Intellectually handicapped students--students who have limited intellectual capacity.

f. Psychologically handicapped students--students who are emotionally disturbed.

This study is primarily concerned with students who have handicaps and are collectively referred to as socioeconomically disadvantaged students. A group of nondisadvantaged students was used for comparative purposes.

SUMMARY

Junior high school is a critical point in time for disadvantaged students. As Miller (1965) and others have pointed out, the junior high school years show the early manifestations of potential dropouts in the form of alienation towards school, poor academic performance, delinquency, and general behavioral prolems. Students who possess educational-vocational handicaps quite frequently represent national problems in the future. Most critics of programs for the disadvantaged have argued that although it is important that we have remedial vocational programs to correct mistakes in the past, it is probably more important to begin to focus on preventative programs to keep our remedial problems at a minimum.

The theoretical work of Super, Roe, Erikson, and Havighurst provide a frame of reference for studying the problems of vocational development of disadvantaged junior high school students. The general developmental learning process is critical in shaping the individual's eventual vocational behavior and direction. The determinants are multiple and interactive upon one another. Hence, the school, community, socioeconomic class, home, and interpersonal relationships are essential as well as physical and intellectual abilities of the individual in understanding his vocational development and behavior.

PURPOSE OF THE STUDY

This study was designed to explore the vocational development of disadvantaged and nondisadvantaged junior high school students. It is assumed that the ways a person views or perceives the world around him influences his behavior, his goals, and his accomplishments. This study was designed to examine the relationships between students' perceptions of their environments, their vocational maturity, perceptions of the relevance of school content to future plans, readiness for vocational planning, and selected student characteristics, with empahsis being given to the differences between disadvantaged and nondisadvantaged junior high school students. Speculation about the plight of the disadvantaged suggests that their problems stem from environment deprivation. The study was undertaken with the expectation that the identification of similarities and differences between the educational-vocational perceptions, aspirations, and antecedents of disadvantaged and nondisadvantaged youth can lead to the development of programs which will enable detrimental differences between the two groups of youth to be reduced or eliminated.

CHAPTER II

DESCRIPTION OF THE SAMPLE AND METHODOLOGY

This chapter describes the sample and specifies the research methodology. The criteria and definition of disadvantaged and nondisadvantaged students are explained. The selection of the sample is outlined in terms of procedures for selecting participating communities (school districts), specific schools and students. Finally, the instruments and procedures for collecting the data are described.

THE SAMPLE

Communities. This study was limited to school systems with enrollments of between 50,000 and 100,000 students (NEA, 1966, p. 112). The larger school systems were selected to increase the probability of having an adequate number of both disadvantaged and nondisadvantaged students within the same school system. A list of large school systems (communities) was identified by the investigators on the basis of geographical distribution within the United States and demographic data describing the community. The demographic data was obtained from the Bureau of the Census which described the degree of socioeconomic and ethnic dispersion within a community. The critical selection criterion was to gain the cooperation of school systems which contained a continuum of students with marked educational, social, and economic handicaps (disadvantaged and nondisadvantaged students). The superintendent of each school system received a letter describing the objectives and procedures of the study and requesting his participation. Approximately eight of the 16 superintendents indicated interest in cooperating. Four school systems (communities) were finally selected on the basis of the socioeconomic-ethnic criteria above as well as their expressed interest in vocational education, the industrial nature of the community, regional representation, and their willingness to participate.

The four communities will be identified throughout the report as Communities A, B, C, and D. Community A is a border southern community; Community B is located in the south; Community C is an eastern seaboard community; and Community D is in the western United States. The communities requested that they not be identified in the study by name.

Schools. Within each community, two schools participated in the study, one identified as serving a primarily disadvantaged population and one identified as serving a primarily nondisadvantaged population.

Each school served both seventh and ninth grade students, usually in a junior high school.

A member of the professional staff of the Board of Education in each community assisted the investigators in selecting the schools which best met the following criteria: A school serving a predominantly disadvantaged population is one which:

1) serves low income families.

2) serves families having poor housing.

3) serves families in which the parents have low educational attainment.

4) is located in an area in which there is a high unemployment rate and high underemployment.

A school serving a predominantly nondisadvantaged population is one which serves families with none of the above characteristics.

Census tract data were included in the totals for a district if at least half of the area covered by the census tract was in the school district (shown in Appendix A). In one community there were no school district boundaries, and school officials indicated the areas from which most of their students came.

It is apparent that the disadvantaged and nondisadvantaged school districts in each community serve different populations, but the amount of difference between the districts varies from community to community. This can readily be seen by comparing the median income of the family. Communities A and B have about a $4,000 difference in income, Community C has about a $3,000 difference, while Community D has only about a $1,000 difference in median family income. This variance in difference between the disadvantaged and nondisadvantaged schools is also apparent in comparing the median years of school completed by the adults in the districts. Community B had the greatest difference (4.2 years difference), Community C the next (3.1 years difference), Community A (2.8 years difference), and Community D the least difference (1.7 years difference).

Although the racial characteristics were not part of the selection criteria of the sample they may be of interest to note. In Communities A and B the disadvanatged school district serves predominantly non-white population, while the nondisadvantaged school district serves almost entirely white population. Community A operates a bussing program, so that the nondisadvantaged school did include some non-white students.

Community C disadvantaged school district served a larger white population than A or B, and the nondisadvantaged school district served a larger non-white population than A or B. In considering the composition of the population in the nondisadvantaged school in Community C it should be noted that private schools are very popular in this area and therefore the nondisadvantaged school population would probably differ from the general census tract population description because many people who can afford to send their children to private schools do so.

The population statistics for Community D indicate that in both school districts there is a low percentage of non-white population. Is is also apparent that both districts have a large number of foreign born population, with the disadvantaged school district having a much larger number than the nondisadvantaged school district. There were some students in the disadvantaged school who were not included in the sample because they could not read English.

The employment data indicate differences in the level of occupations of the population in the disadvantaged and nondiasdvantaged school districts. Housing data also indicate clear distinctions between the population of the disadvantaged and nondisadvantaged school district.

The census data in general indicate that the populations served by the disadvantaged and nondisadvantaged school differ markedly with regard to income, housing, and employment. The greatest amount of difference is in Community B, the southern community, and the least amount of difference is in Community D, the western community.

The census data substantiate the initial selection of schools representing disadvantaged and nondisadvantaged schools on the basis of the four socioeconomic criteria.

The principal of each of the participating schools provided basic information about his school, his staff, and its program. These data are shown in Appendix B. The data on these participating schools indicate that schools serving the disadvantaged students are approximately comparable to those serving the nondisadvantaged students in terms of school enrollment, and pupil-teacher ratio, but differ for rate of absenteeism, the percent who graduate and the percent who pursue post-high studies.

Subjects. Within each school, a member of the school administrative staff identified the students to be tested. From the seventh grade and ninth grade cohorts, 175 to 200 students per grade were selected. A sample representing all ability levels was requested. Those students with a reading level of fourth grade or lower were not included. The number of students included in the final sample is indicated in Table 1.

Teachers in each of the participating schools were asked to nominate those students who they judged not to fit the school category of disadvantaged or nondisadvantaged. The number of subjects nominated for this reason is shown in Appendix C. In Community B, the southern city, the percent nominated as nondisadvantaged students in a disadvantaged school was much higher than the percent for the other communities and in Community C, the eastern seaboard city, the percent nominated as nondisadvantaged students in a disadvantaged school was higher than the other communities. It can be concluded that the school designation of disadvantaged or nondisadvantaged is characteristic of most of the students in the sample.

Teachers in all of the participating schools were also asked to define "disadvantaged students." There were no apparent differences between the definitions given by teachers in the disadvantaged schools and those given by teachers in the nondisadvantaged schools. Generally, social and economic deprivation was considered the major contributing factor. Lack of experiences with varied environments, lack of training in self-discipline, responsibility, and citizenship

TABLE 1

NUMBER OF DISADVANTAGED AND NONDISADVANTAGED SUBJECTS IN FINAL SAMPLE BY COMMUNITY, GRADE, AND SEX

City	Grade	Sex	Disadvantaged	Nondisadvantaged
A	7	Male	70	80
A	7	Female	91	71
A	9	Male	70	77
A	9	Female	90	85
B	7	Male	60	78
B	7	Female	62	92
B	9	Male	65	70
B	9	Female	74	106
C	7	Male	70	59
C	7	Female	88	71
C	9	Male	54	77
C	9	Female	51	60
D	7	Male	81	64
D	7	Female	68	87
D	9	Male	72	65
D	9	Female	81	81
		Sub totals	1147	1223
		Sample total		2370

were often mentioned, as well as lack of ambition and satisfaction with the status quo. Finally, most indicated that disinterested parents, broken homes, or parents without the education or skills to teach to their children contribute to the child's becoming disadvantaged.

The usual age for the 7th grade was 12 or 13 years of age and for the 9th grade was 14 or 15 years of age. The percent of students over the usual age group for their grade is reported in Appendix D. Though there are some exceptions, there is a trend for a higher proportion of the disadvantaged groups to be overage for grade than for the nondisadvantaged groups.

Another variable used in describing the sample is the number of people living at home with the student, which indicates the potential for family interaction, for competition for attention and family resources, and for experiences with other people. The disadvantaged students have larger numbers of people at home than do the nondisadvantaged students in the sample (shown in Appendix E).

Data on families with both parents living at home and those where both parents are not living at home indicate more disadvantaged homes do not have both parents. It should be noted, however, that a relatively high percentage of families in the disadvantaged group do have both parents present (shown in Appendix F).

The number of years of schooling completed by the father and by the mother is another descriptive variable. The percent of fathers having a 12th grade education or less and the percent having more than a 12th grade education are indicated in Appendix G. The same information for the mothers of the students in the sample is presented in Appendix H. Except for Community D, where the educational level of the father is similar there is clearly a difference between the disadvantaged and nondisadvantaged groups in our sample on these variables. The disadvantaged groups tend to have a higher percentage of families living in rented homes (see Appendix J) and a higher percentage of families in their present homes for a short period of time (see Appendix K). Data indicate some differences between the disadvantaged and nondisadvantaged groups living in only one or two houses, with the nondisadvantaged group having a somewhat higher percentage (see Appendix L). The disadvantaged groups have lived in fewer different cities than the nondisadvantaged students in Communities, A, B, and C. In the western city, Community D, however, the two groups report almost identical percentages (see Appendix M).

INSTRUMENTS

Perceptions of students. An inventory was constructed to measure the perceptions of junior high school students regarding school, work, family, peers, and self. This inventory was called the Student Perception Inventory (see Parsons, 1967). Content of the items for the instrument was derived from a literature review of disadvantaged junior high school students and of vocational development and from taped interviews with disadvantaged students conducted by the investigator and an assistant of the opposite sex. The students were asked a series of structured questions designed to elicit concepts, phrases, and vocabulary used by students to describe their perceptions of school,

work, family, and self. Items were tested for appropriate vocabulary for the grade levels, ability of junior high school students to understand the items, and ability of the students to understand the item format. Thirty disadvantaged students in a low ability seventh grade class were asked to read the items silently, or to read them silently while the investigator read aloud. Each student circled the words or the items which he did not understand. The original items were modified or eliminated on the basis of these results.

Item format was adapted from Osgood's Semantic Differential technique. An item or construct is presented as a polarity with the two ends of the continuum specified. The respondent selects one end of the continuum or the other as best representing his feelings or his actions. He then selects the degeee to which that end of the continuum represents his feelings ("a little," "some," or "very much"). There is also an undecided category, labeled "neither." From the seven response alternatives only one response may be selected. An item is scored from 1 to 7. An item appears in the following form:

School is easy	(1) very much	(2) some	(3) a little	(4) neither	(5) a little	(6) some	(7) very much	School is hard

The thirty disadvantaged students also answered the items in the preliminary form to determine whether these students could understand the directions and the item format. All students were able to perform the tasks required to complete the instrument. It was apparent that a verbal explanation of instructions, as well as a written one, was necessary and that students must be allowed to ask questions. The final form of the Student Perceptions Inventory contained 109 items (see Parsons, 1967).

The Vocational Development Inventory, Attitude Scale. This instrument, developed by J. O. Crites, was selected to measure the vocational development of junior high school students. The Attitude Scale is composed of 50 self-descriptive statements about an individual's vocational attitudes and behaviors. The following dimensions of vocational maturity are covered by the statements: involvement in the choice process, orientation to work, independence in decision making, basis for choice, and conceptions of the choice process. A subject responds to a statement by indicating his agreement or disagreement with the statement. A vocational maturity score (VM) for each subject is derived from the total number of responses a subject makes which are the same as those made by the 12th grade criterion group.

Information. Several forms were used in the collection of various types of information (see Parsons, 1967). Teachers in the participating schools indicated their definitions of disadvantaged students. They also nominated those students they felt did not fit the designated school type (disadvantaged or nondisadvantaged). This information was collected on a teachers form.

Students were asked to complete a Student Information form which included questions regarding personal history and ideas and plans regarding school and work.

A School Information form was completed by the principal in each school, including information regarding the staff, the school, and its program.

A Community Information form was used to compile the census tract data for each tract with 50 percent or more area in the district of the participating school. In one community there were no school district boundaries and school officials indicated the areas from which most of their students came.

PROCEDURES

Data collection took place in the spring of 1967. In each of the cooperating school districts a member of the professional staff of the Board of Education made the initial contact with the principal of each participating school. Various school personnel, including the principal, vice principal, and guidance counselors, assisted in selecting subjects, arranging the testing schedule, and providing classroom teachers as assistants.

Arrangements were made in accord with the schedule of each school and differed greatly from school to school and even from grade to grade within a school. The tests were administered in a variety of settings including classrooms, auditoriums, cafeterias, and libraries. Some subjects completed the testing in one 60 to 75 minute testing period; others, in two 30 to 40 minute periods. Testing was conducted in various group sizes ranging from classroom size of 25 to 35 students to larger groups of 100 to 200 students, depending upon school facilities and scheduling.

Two persons from the project staff conducted the data collecting sessions in each school. During the testing sessions each student completed the Vocational Development Inventory, the Student Perceptions Inventory, and the Student Information form. The tests were not timed and students varied greatly in the time needed to complete the materials.

Classroom teachers assisted during the testing sessions. They maintained school discipline and answered questions regarding the test materials. They also noted and withheld the test materials of students, who, in their judgment, were unable to read and understand all of the test materials, were marking the materials incorrectly, or did not wish to participate. In three schools this general format was altered slightly. In two schools the homeroom teachers supervised the completion of the Student Information form and the Vocational Development Inventory, and in one school the Guidance Counselor administered the Vocational Development Inventory to one grade level.

CHAPTER III

RESULTS AND DISCUSSION

The material presented in this chapter is arranged in a manner which brings attention to the variables of major interest. Thus, comparisons between disadvantaged and nondisadvantaged *Ss* regarding several kinds of variables are reported. The first kind of question concerns student planning behavior with reference to educational and vocational aspirations in general. A second type of question concerns the perception of school as a vehicle with which to implement career development; a third kind of question is directed toward the educational-vocational models the parents provide, the relation of these models to the students' vocational aspirations, and perceived barriers to career attainments.

Before the findings themselves are reported, a caution to the reader is in order. Many zero order correlations will be reported, and such correlations must be viewed with special caution because they may frequently be spurious, partly because two variables may be correlated with one another only because each is correlated with a third variable. Thus, the results to be reported are presented tentatively; hence, the exploratory nature of the study.

EDUCATIONAL-VOCATIONAL PLANNING

Four questions asked of the students as part of the general information gathering procedure are relevant to the question of educational-vocational planning. These questions were: How long would you like to go to school? How much thought have you given to your school plans? How much thought have you given to your future job? How much choice of occupation do you have?

The amount of schooling desired by disadvantaged and non-disadvantaged male students in each of the four communities was compared by means of the Kolmogorov-Smirnoff two sample test. The results of this comparison (summarized in Appendix R) indicated significant differences in the number of years of school desired by the two groups of male subjects in all four communities. Generally, most nondisadvantaged males expect to complete four years of college work while the disadvantaged students are more evenly split between those expecting to eventually graduate from college and those desiring to graduate from high school. Relatively few of either group who expect to begin college expect to attend for less than four years, and very few do not desire at least a high school diploma. For girls, the results (also shown in Appendix R) are similar.

Appendix S summarizes the amount of consideration given to school plans of disadvantaged and nondisadvantaged groups by sex, grade, and community. It also presents the results of the Kolmogorov-Smirnoff two sample test comparing the groups. Few differences between disadvantaged and nondisadvantaged groups are apparent. For the male subjects, only those at the seventh grade level in two communities report differences in the amount of thought given to school plans. For the females also, two groups show such differences; one occurring in the same community as for males. Interestingly, the differences observed indicate that the disadvantaged subjects report giving more thought to scholastic plans than the nondisadvantaged *Ss*.

Appendix T summarizes differences regarding the amount of thought given to future jobs by the various subject groups and the Kolmogorov-Smirnoff two sample test results. Here again, as was the situation regarding consideration given to school, the findings generally indicate that where differences between disadvantaged and nondisadvantaged *Ss* exist, the disadvantaged have given more thought to their future job than the nondisadvantaged. Only one exception to this, for ninth grade males in Community C, may be observed.

Appendix U reports the results of the comparison of the groups with regard to the question of how much choice of occupation they think they possess. No systematic differences appear to exist concerning this question, though differences may be observed between seventh grade female disadvantaged and nondisadvantaged *Ss* in Communities B (where the disadvantaged report higher levels of perceived potential choice of career than the nondisadvantaged) and D (where the reverse occurred).

Vocational maturity. The Vocational Development Inventory, Attitude Scale (Crites, 1965) yields a vocational maturity score for each subject. The possible range of scores is from 0 to 50, from low to high maturity. Mean vocational maturity scores (Table 2) range from 26.56 to 32.93 for the disadvantaged students and from 31.01 to 36.80 for the nondisadvantaged students. The means for the nondisadvantaged students are consistently higher.

Tables 3 through 8 summarize the correlations between student planning and choice variables. In Table 3, where once again the relationships are statistically significant but low, the correlations between educational level desired by the student and the amount of thought he gives to school plans are summarized. Significant correlations exist for two male nondisadvantaged groups and one male disadvantaged group, while three female disadvantaged and three female nondisadvantaged groups show significant correlations. The data do not indicate any differential effect on school planning associated with being disadvantaged and nondisadvantaged.

Table 8 summarizes the correlations between educational level desired and amount of thought given to future job. This is potentially an important relationship to observe, since if students see school as a productive vehicle through which to implement a vocational choice, the educational system could provide a lever by which to maintain the scholastic interest of the disadvantaged. The results are encouraging since more than half the groups reflect significant correlations between these potentially important variables.

TABLE 2

COMPARISON BY COMMUNITY, GRADE LEVEL, AND SEX OF MEAN VOCATIONAL MATURITY SCORES FOR DISADVANTAGED AND NONDISADVANTAGED STUDENTS

Community	Grade Level	Sex	Vocational Maturity			
			Disadvantaged		Nondisadvantaged	
			Mean	St. Dev.	Mean	St. Dev.
A	7	Male	25.57	5.80	31.01	5.77
A	7	Female	26.56	6.32	33.94	4.80
A	9	Male	29.40	4.64	34.86	4.78
A	9	Female	30.48	4.86	36.34	4.61
B	7	Male	27.10	4.95	31.87	5.16
B	7	Female	26.86	5.38	33.23	6.70
B	9	Male	29.83	4.99	35.27	4.27
B	9	Female	31.07	5.78	36.80	4.15
C	7	Male	27.23	5.98	31.31	4.82
C	7	Female	27.36	4.92	32.96	5.26
C	9	Male	30.59	4.92	34.09	4.38
C	9	Female	30.45	5.02	34.23	4.03
D	7	Male	28.79	5.66	32.56	4.84
D	7	Female	28.40	5.25	32.93	4.29
D	9	Male	32.93	4.96	33.67	4.32
D	9	Female	31.80	5.24	34.66	5.21

TABLE 3

CORRELATION OF LEVEL OF EDUCATION DESIRED BY THE STUDENT WITH THE AMOUNT OF THOUGHT GIVEN TO SCHOOL PLANS

Community		Disadvantaged Males	Nondisadvantaged Males	Disadvantaged Females	Nondisadvantaged Females
A	N	110	137	161	151
	R	.1850	.111	.1533**	.3525**
B	N	110	143	121	193
	R	.1233	.2086**	.2306**	.1631**
C	N	120	124	136	123
	R	.2147**	-.0051	.1375	.0418
D	N	144	124	146	166
	R	.1455	.2031**	.2282**	.1894**

** Significant at .01 level

TABLE 4

CORRELATION OF THE LEVEL OF EDUCATION DESIRED BY THE STUDENT WITH THE AMOUNT OF THOUGHT GIVEN TO FUTURE JOB

Community		Disadvantaged Males	Nondisadvantaged Males	Disadvantaged Females	Nondisadvantaged Females
A	N	102	134	158	149
	R	.2350*	.2080*	.1208**	.1395*
B	N	104	142	113	193
	R	.0891	.1750*	.0037	.1438*
C	N	119	124	136	123
	R	.1876*	.0633	.0941	.1268
D	N	145	125	146	166
	R	.0416	.0596	.2792**	.2566**

* Significant at .05 level
** Significant at .01 level

TABLE 5

CORRELATION OF LEVEL OF EDUCATION DESIRED BY THE STUDENTS WITH THE AMOUNT OF CHOICE OF JOB THEY THINK TO BE AVAILABLE

Community		Disadvantaged Males	Nondisadvantaged Males	Disadvantaged Females	Nondisadvantaged Females
A	N	98	134	158	147
	R	.0366	.1357*	.1290*	.2031**
B	N	103	142	115	192
	R	.2046*	.2197**	-.0131	.1869**
C	N	119	123	136	122
	R	.1593*	.1549*	.1807*	.3292**
D	N	143	125	146	166
	R	.0788	.1176	.2466**	.3564**

* Significant at .05 level
** Significant at .01 level

TABLE 6

CORRELATION OF THOUGHT GIVEN BY STUDENTS TO EDUCATION WITH THE AMOUNT OF CHOICE OF JOB THEY THINK THEY HAVE

Community		Disadvantaged Males	Nondisadvantaged Males	Disadvantaged Females	Nondisadvantaged Females
A	N	103	141	173	150
	R	.5855**	.3293**	.2555**	.2907**
B	N	112	147	127	197
	R	.3199**	.2289**	.3741**	.2279**
C	N	120	131	136	130
	R	.4645**	.1660*	.3942**	.2801**
D	N	148	128	149	168
	R	.1823**	.3169**	.3496**	.3938**

* Significant at .05 level
** Significant at .01 level

TABLE 7

CORRELATION OF THOUGHT GIVEN BY STUDENTS TO SCHOOL PLANS WITH THE THOUGHT GIVEN BY THEM TO FUTURE JOBS

Community		Disadvantaged Males	Nondisadvantaged Males	Disadvantaged Females	Nondisadvantaged Females
A	N	107	141	173	152
	R	.6808**	.6188**	.6697**	.6199**
B	N	114	147	123	198
	R	.4231**	.5675**	.385**	.6321**
C	N	121	132	139	131
	R	.6193**	.6026**	.7706**	.6426**
D	N	150	128	149	168
	R	.5089**	.7866**	.5977**	.6139**

** Significant at .01 level

TABLE 8

CORRELATION OF THE AMOUNT OF THOUGHT BY STUDENT GIVEN TO JOB WITH THE AMOUNT OF CHOICE OF JOB THEY THINK THEY HAVE

Community		Disadvantaged Males	Nondisadvantaged Males	Disadvantaged Females	Nondisadvantaged Females
A	N	106	143	175	150
	R	.5701**	.3933**	.1626**	.3317**
B	N	110	146	123	197
	R	.1997*	.4168**	.2227**	.1936**
C	N	120	132	136	130
	R	.5011**	.2293**	.2868**	.3516**
D	N	149	129	149	168
	R	.1607**	.4186**	.5070**	.3710**

* Significant at .05 level
** Significant at .01 level

In Table 5 the correlation between the level of education desired and the amount of job choice perceived is summarized. Once again, both disadvantaged and nondisadvantaged students in several communities showed significant correlations between these variables, though more correlations were significant for nondisadvantaged *Ss*. These significant correlations may suggest that students' desire for education is to some degree related to the degree to which the belief is held that one has some control over his choice of future work. In other words, it pays to go to school if you think you are able to control your destiny, in part, through your academic achievements.

Table 6, summarizing the correlation between students' thought given to education with the amount of job choice they think they have, reflects trends similar to those seen in Tables 4 and 5, and probably for similar reasons. Here, all the correlations are significant, and many are considerably higher than those seen in the other analyses. These findings seem to suggest that students make plans about their education if they think it makes a difference (in terms of increasing their ability to manipulate their future job) to do so.

In Table 7 the correlations between student thought given to school plans and thought given to future jobs are shown. On the basis of these high correlations, it seems reasonable to assume that student thoughts about education stimulates and is stimulated by thinking about future jobs.

Table 8 reflects the correlations between the amount of thought students give to their future job with the amount of choice of job they think they have. Once again, all the correlations are significant. It makes sense to assume that students will engage in planning (thinking about their future job) if they think the results of their planning will be reflected in some control over the resulting decision.

Summary. The correlations generally indicate that the amount of thought about education and future job, educational aspiration, and the amount of choice of occupation, are related. The correlations between education desired and amount of thought given to education are high for nearly all students in all communities. Similarly, the correlations between amount of education desired and amount of thought given to future job are high. The correlations between amount of education desired and the amount of perceived choice occupation (which might be construed to represent one way which students see education being related to future work and status) are generally high, though more convincingly in the nondisadvantaged groups. Correlations between amount of thought about education and amount of thought about job are high for all groups; the correlation between amount of thought about job and amount of occupational choice freedom possessed is high for all groups, as is the correlation between amount of thought given to education and the amount of occupational choice perceived. These latter findings suggest that students might think about their educational and vocational plans if they perceive that it makes a difference to do so (that is, if they think they have a choice). This would imply that it is important for the educational establishment to show students operationally how they may influence their occupational activity in the future by what they do in the present.

PERCEPTIONS OF SCHOOL

The responses to the 109 items of the Student Perception Inventory plus four additional variables (disadvantaged status, grade level, academic grades, and sex) were factor analyzed, using the Kaiser Varimax Rotation Method. Previous work using this approach was reported by Fletcher (1967). Details concerning the development of the scales have been reported in Parsons (1967).

Four identifiable factors emerge. The first, Factor I, Teacher-Student Relationship, is represented by items pertaining to the way teachers relate to students, whether the teachers are understanding, fair, friendly, helpful, and care about students. The mean scores for disadvantaged and nondisadvantaged groups (see Appendix N) indicate that in Communities A, C, and D disadvantaged students report more positive responses about teachers than nondisadvantaged students. Community B, the southern community, is not consistent.

Factor II was called Work and the Future. Factor II items have to do with desired characteristics of a job; two items focus on future time perspective; one item has to do with the importance of school for the future; and one item is concerned with parental attitude toward grades in school. The means for each group tend to be slightly higher for the nondisadvantaged students, but the differences are very small (shown in Appendix O).

Factor III, called Family-Child Relationship, described the warmth toward and concern of parents for their children. There is little difference between the mean scores for the nondisadvantaged and disadvantaged groups (see Appendix P).

Factor IV, Level of Difficulty with School Work, pertained to the construct of difficulty (easy versus hard). The mean scores for the nondisadvantaged groups are lower than the mean scores for the disadvantaged students, with the exception of the southern community, Community B, seventh grade boys and the western community, Community D, ninth grade girls. This trend indicates that the disadvantaged students tend to consider school to be easier than the nondisadvantaged student (see Appendix Q).

Relationship among variables. Table 9 represents the correlations among all the variables in the analysis. As a result of the large sample size, correlations of .081 or more are significant beyond the .01 level of probability.

The intercorrelations among the student identification variables indicate, as might be expected, that there are no significant relationships. The intercorrelations among the student characteristic variables indicate that there are two relatively highly correlated pairs of variables. Father's education and mother's education correlate .630, and consideration of school plans correlates .624 with consideration of future job. The variable, schooling desired by student, correlates significantly with father's education (.287) and mother's education (.291).

Even though the items included for the scoring of each of the perception factors were selected on the basis of relative independence

TABLE 9

CORRELATION OF STUDENT IDENTIFICATION VARIABLES, STUDENT CHARACTERISTIC VARIABLES, PERCEPTION FACTOR SCORES, AND VOCATIONAL MATURITY SCORES

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Student Identification															
(1) Disadvantaged-Nondisadvantaged	1.000	.022	.006	0.272	0.292	-0.375	-0.367	-0.291	-0.100	-0.074	0.129	-0.158	0.030	0.200	-0.414
(2) 7th and 9th Grade		1.000	.005	0.088	-0.039	-0.023	0.022	0.006	0.110	0.077	0.140	-0.118	0.066	0.081	-0.275
(3) Female-Male			1.000	-0.050	-0.076	0.044	0.051	0.046	0.066	0.011	-0.073	-0.105	-0.017	-0.021	-0.071
Student Characteristics															
(4) Number of People Home				1.000	-0.074	-0.147	-0.150	-0.120	0.005	0.017	0.082	-0.020	0.033	0.104	-0.225
(5) Both Parents at Home					1.000	-0.115	-0.132	-0.130	-0.095	-0.074	-0.002	-0.078	-0.075	0.022	-0.156
(6) Father's Education						1.000	0.630	0.287	0.048	-0.004	-0.047	0.113	0.105	-0.120	0.283
(7) Mother's Education							1.000	0.291	0.041	0.039	-0.074	0.104	0.075	-0.094	0.234
(8) Schooling Desired by Student								1.000	-0.115	-0.115	0.009	0.228	0.076	-0.038	0.298
(9) Consideration of School Plans									1.000	0.624	-0.151	-0.193	-0.151	-0.055	-0.127
(10) Consideration of Future Job										1.000	-0.073	-0.143	-0.086	-0.032	-0.150
Perception Factors															
(11) Teacher-Student Relationship (Factor I)											1.000	0.252	0.371	0.366	-0.040
(12) Work and the Future (Factor II)												1.000	0.253	0.011	0.291
(13) Family-Child Relationship (Factor III)													1.000	0.170	0.061
(14) Level of Difficulty with School Work (Factor IV)														1.000	-0.090
Vocational Maturity															
(15) Vocational Maturity Score															1.000

1 = correlations are significant at the .01 level at approximately .070 or higher.

2 = each correlation is based upon the lowest N of the two variables; N for variables 1 through 3 is 2370; N for variables 4 through 15 refer to Table 35 for the specific N's for each variable.

of other perception factors, it is clear from the intercorrelation coefficients that the factors as scored are not completely independent. Factor I has significant intercorrelation with each of the other factors. Only Factor II and Factor III are not significantly correlated. At the same time, the intercorrelations are sufficiently low to indicate that the factor scores are independently meaningful.

The characteristic of being disadvantaged is associated with some student characteristics: larger numbers of people living at home (.272), both parents not living at home (.292), low education attainment of father (-.375) and mother (-.367), and less schooling desired by student (-.291). It is also related to Perception Factor IV (.200), viewing school as easier, and to low vocational maturity (-.414).

As might be expected, grade level is correlated with vocational maturity (-.275), the ninth grade associated with higher vocational maturity scores. Higher vocational maturity is also associated with fewer people living at home (-.225), higher educational attainment of father (.283) and mother (.254), and more schooling desired by the student (.298).

Perception Factor II, "Work and the Future," is correlated with vocational maturity (.291) indicating, as might be expected, that those students who report concern for their future job and getting ahead have higher vocational maturity scores. It is also correlated with more schooling desired by the student (.228).

Summary. The two student groups are remarkably similar in their perceptions, especially of school. The nondisadvantaged see school as somewhat more important to their future, but the disadvantaged report more positive responses to their teachers and see school as somewhat easier than do their nondisadvantaged counterparts.

PARENTS, PREFERENCES, AND PROBLEMS

With the idea that scrutiny of the relationship between student expressions of educational and vocational aspirations and impressions and parental educational levels and employment patterns might be instructive, a number of correlations were computed. These correlations concerned the same student variables mentioned earlier in this chapter (i.e., education desired, amount of thought given to educational plans, amount of thought given to job, estimates of the amount of choice of occupational available to them) on the one hand and parental levels of education. In addition, certain intercorrelations were computed between variables, such as amount of education desired and amount of thought given to future job. Those correlations related to student variables and father's education are summarized in Table 10, and those related to mother's education in Tables 11 and 12.

While many variations and exceptions by community may be observed and must be kept in mind, some general trends in the data are apparent and may be pointed out. For example, the correlations as seen in both Tables 10 and 11, even when they reach significance level, are small in absolute terms. Thus, it seems likely that even though parental educational level influences student educational aspiration level,

TABLE 10

CORRELATION OF FATHER'S EDUCATION WITH THE NUMBER OF YEARS THE STUDENTS WOULD LIKE TO GO TO SCHOOL

Community		Disadvantaged Males	Nondisadvantaged Males	Disadvantaged Females	Nondisadvantaged Females
A	N	36	99	62	107
	R	.2333	.2867**	.1041	.3895**
B	N	57	121	65	156
	R	.0790	.1641**	-.0165	.1874**
C	N	56	92	61	88
	R	.0120	.2673**	.2189	.4882**
D	N	81	95	65	109
	R	.2937**	.1573	.3214*	.0878

* Significant at .05 level
** Significant at .01 level

TABLE 11

CORRELATION OF MOTHER'S EDUCATION WITH THE NUMBER OF YEARS THE STUDENTS WOULD LIKE TO GO TO SCHOOL

Community		Disadvantaged Males	Nondisadvantaged Males	Disadvantaged Females	Nondisadvantaged Females
A	N	58	106	96	124
	R	.2863*	.2631**	.0820	.3401*
B	N	67	125	79	168
	R	.3281**	.0441	.0718	.2918**
C	N	61	98	81	99
	R	-.0037	.4255**	-.0564	.3465**
D	N	91	105	90	130
	R	.3232**	.1633	.2179	.0928

* Significant at .05 level
** Significant at .01 level

TABLE 12

CORRELATION OF MOTHER'S EDUCATION AND AMOUNT OF CHOICE OF JOB THE STUDENT THINKS HE/SHE HAS

Community		Disadvantaged Males	Nondisadvantaged Males	Disadvantaged Females	Nondisadvantaged Females
A	N	53	109	106	123
	R	-.0324	.0723	.1548	.2246**
B	N	66	129	83	171
	R	.0682	.0703	.2792**	.1087
C	N	61	101	82	104
	R	.0431	.0384	.0989	.2391**
D	N	94	107	92	132
	R	.0869	.3257**	.1158	.2295**

* Significant at .05 level
** Significant at .01 level

other (unidentified) variables contribute to the major portion of the variance. Observing the relationship between father's educational level and student aspiration, (Table 10) a difference between disadvantaged and nondisadvantaged students in all communities except D is apparent. The nondisadvantaged *Ss*' educational aspirations are more closely related to their fathers' educational levels than those of the disadvantaged. The fathers of nondisadvantaged have more schooling than those of the disadvantaged, which could suggest that the disadvantaged students do not suffer a substantial deficit in educational aspiration simply because their fathers do not present the model of a highly educated individual.

A different sort of pattern concerning the relationship between mother's educational level and student educational aspiration is seen in Table 11. Here, no striking difference in male *Ss* is evident, but a substantial difference is seen between the female *Ss* in three of the communities. (Community D reveals no clear difference in educational attainment for disadvantaged versus nondisadvantaged parents.) Here the inference might tentatively be drawn that mother's are less relevant educational influencers for boys than fathers are for girls. As a result, the nondisadvantaged females educational aspirations are naturally more closely related to the educational levels of their more highly educated mothers than the aspirations of the disadvantaged females, whose mothers generally have had less school.

In general, for both groups the inference might be drawn that parental educational levels do not seem to be negatively related to the educational aspirations of disadvantaged youth.

The relationship between father's and mother's educational level and other variables was observed. Only one significant correlation among all groups, communities, and sexes was found between father's education and student thought about school plans; this a negative correlation for nondisadvantaged females in Community C. Similarly, correlations between father's education and thought given by students to future job revealed only two significant correlations, those for disadvantaged males (r=.26) and disadvantaged females (r=.39) in Community D. No significant correlations were found between father's education and student estimate of the amount of occupational choice he possesses, nor were any found between mother's education and amount of thought given by student to either future job or future schooling.

In Table 12 are summarized the correlations between mother's education and student expectations of the amount of job choice they possess. A few scattered significant correlations may be observed for the two male groups and the female disadvantaged group, but only for the nondisadvantaged females do the significant correlations occur with enough frequency to warrant notice. This might suggest, once again, that mother's educational patterns have no strong impact on son's career perceptions, but that daughters whose mothers are more highly educated, as are the nondisadvantaged subjects mothers, may get a greater feeling about their ability to personally control occupationally significant events.

Career plans and preferences. In addition to family background data, the student information questionnaire elicited information about student vocational planning behavior in several ways. *Ss* indicated occupations they considered entering, occupations they preferred, and

occupations they planned or expected to enter. Responses to the questions framed in these particular ways was especially useful in searching for important points of difference in the degree of congruence or in career hopes and expectations of disadvantaged and non-disadvantaged youth. It is thus possible to observe differences in the degree to which disadvantaged and nondisadvantaged *Ss* perceive their plans to be open to implementation as well as differences between the two groups with respect to the fields and levels of occupations they consider and prefer.

To accomplish these comparisons, the occupations listed by the students in response to the questions concerning considered, preferred, and planned careers were coded according to a modified version of Roe's Classification of Occupations (1956). Roe's classification system divides occupations into eight fields (service, contact, organization, technology, outdoor, science, general cultural, and arts and entertainment) and six levels, ranging from professional and managerial at the top to unskilled at the bottom. In this study, the system was modified by omitting the outdoor category (which has few entries, all of which can logically be coded elsewhere) and using only five levels (professional-managerial, subprofessional, skilled, semi-skilled, and unskilled). In addition, categories for uncodable responses were devised, as well as for special kinds of responses such as housewife, "don't know," retired, deceased, and unemployed.

The responses for students were sorted by sex and disadvantaged-nondisadvantaged status, but combined with respect to community and grade in school. Responses of the students describing the occupational activities of their parents were also coded and compared.

Table 13 summarizes the results of these analyses. Several trends in the data are apparent. The occupations considered by the male disadvantaged *Ss* reflect a relatively high level of aspiration, though not as high as that of the nondisadvantaged. The aspiration level seems relatively independent of the father's level, but the level of occupational plans of the disadvantaged *Ss* are somewhat more closely related to father's level than those of nondisadvantaged boys. It is difficult to know what implications the different field considerations imply, but one point does appear notable. The disadvantaged boys probably have relatively few environmental supports necessary for the pursuit of a career in technology, the field most commonly considered by the disadvantaged males.

The situation for the females is similar. Both disadvantaged and nondisadvantaged girls consider occupations implying a fairly high level of aspiration. Again, as seen in data about the boys, the disadvantaged girls have a somewhat higher (but still small) correlation between their occupational level planned and mothers' level. The most and least considered fields for both female groups are fairly similar.

In general, the ranking of the considered fields of the disadvantaged and nondisadvantaged are similar. Where slight differences occur they are more commonly observed between the male groups than between the female groups. Finally, there is a moderately high relationship between what the students consider doing vocationally, what they would like to do, and what they plan to do, suggesting that both groups at their current stage of career development

TABLE 13

CHARACTERISTICS OF OCCUPATIONAL PREFERENCES, PLANS, AND EXPECTATIONS OF SUBJECTS

Variable	Male disadv.		Male nondis.	Female disadva.		Female nondis.
Most commonly considered field	technology (31%)		service (31%)	service (46%)		service (34%)
Second most considered field	service (28%)		arts and enter (18%)	gen. cult and organiz. (23%)		gen. cult. (30%)
Least commonly considered field	contact (3%)		contact (4%)	science (1%)		contact (-1%)
Second least considered field	organization (3%)		general cult (5%)	contact and technol. (1%)		technology (1%)
Level of field considered:						
Professional-managerial	45%		67%	35%		48%
Sub-professional	21		15	24		18
Skilled	26		13	28		24
Semi-skilled	6		3	12		10
Unskilled	2		1	1		0
X^2		39.79xx			18.21xx	
Correlations:						
field considered, field preferred	xx.59		xx.58	xx.58		xx.58
field planned, field considered	xx.48		xx.56	xx.48		xx.51
like-sex parent field, considered field	x.14		x.11	-.01		.005
like-sex parent field, planned field	xx.20		.09	.06		-.01
level of first with second considered field	xx.33		xx.21	xx.23		x.09
level considered, level planned	xx.47		xx.45	xx.44		xx.41
level considered, level preferred	xx.52		xx.44	xx.56		xx.46
like-sex parent level and considered level	.09		.03	.04		.06
like-sex parent level and planned level	x.16		.005	x.11		.006

x = $p < .05$
xx = $p < .01$

possess a relatively high degree of feeling about their ability to implement their vocational desires. In neither social group do parental occupational activities seem to provide an influential model at their stage of development.

The results of the Kolmogorov-Smirnoff two sample test comparing the frequencies disadvantaged and nondisadvantaged males and females consider occupations at different levels (shown in Table 13) indicates a significant difference between the disadvantaged and nondisadvantaged males as well as between the disadvantaged and nondisadvantaged females. Reflecting reality, the job considerations of the disadvantaged groups are more evenly distributed across levels than those of the nondisadvantaged. Predictably, both disadvantaged and nondisadvantaged *Ss* tend to consider jobs whose levels are skewed toward the professional end of the scale.

Several other family variables concerning occupation were observed which should be noted. For males, the field of employment for the non-disadvantaged groups differed: more nondisadvantaged fathers were in "contact" occupations; disadvantages subjects more frequently omitted their father's occupation and gave more uncodable responses than the nondisadvantaged; this suggests, logically, that more disadvantaged than nondisadvantaged fathers were not working or, if they were, the work was ambiguous or varying. Concerning father's occupational level for male subjects, the fathers of nondisadvantaged *Ss* were employed at the top three levels more often than the fathers of disadvantaged boys. Where a job level response was available for the fathers of disadvantaged boys it was more likely to be at the unskilled or semi-skilled level than for the fathers of nondisadvantaged *Ss*.

The work patterns of the mothers of the female subjects were also different. The disadvantaged mothers were more likely to be working in service jobs than the nondisadvantaged mothers, who were more likely to be employed in organizational jobs. Curiously, listings as housewife only were observed in about equal proportions for both groups. As to level, trends similar to those observed for males were present, though to a much less extreme degree.

Anticipated problems in implementing occupational choices. Student responses to a question concerning anticipated problems which might potentially interfere with the achievement of their career objectives were classified, tallied, and compared for the four student groups (DM, NDM, DF, NDF). The raw frequency of responses occurring in each category are shown in Table 14. No attempt was made to compute statistical tests on these data for several reasons. First, as can be seen in Table 14, about one-third of the students failed to respond to the question. It is not possible to determine whether a failure to respond indicated "no problem" or whether it meant that the student failed to understand the question. A second problem is that students frequently indicated more than one potential obstacle, so that the potential population of problem responses indicated by the various groups is not statistically comparable. Despite these limitations, the data indicate suggestive trends and are reported in their raw form.

Since the four subgroups were approximately the same size, it can be seen that somewhat fewer nondisadvantaged *Ss* report "no problem" than do disadvantaged; similarly, more disadvantaged failed to respond to the item. This observation holds for both sexes.

TABLE 14

STUDENT PERCEPTIONS OF POTENTIAL PROBLEMS IN IMPLEMENTING CAREER PLANS

Response	DM	NDM	DF	NDF
no problem	96	69	99	54
no response	243	171	235	169
did not understand question	7	2	11	3
SUBTOTAL	346	242	345	226
interpersonal	9	19	8	26
physical health	16	16	15	38
motivational	6	4	4	5
family	5	7	13	12
temperamental	9	17	20	41
psychological health	3	7	8	13
military draft	1	7	2	0
financial	27	74	35	50
education	60	152	70	104
performance	23	24	36	73
ability	10	40	32	50
race	7	4	22	2
job choice and placement opportunity	24	52	27	65
marriage	2	0	1	2
competition	9	29	9	30
sex	0	0	3	8
SUBTOTAL	211	452	305	519

For those subjects who did respond, it can be seen that nondisadvantaged Ss list almost twice as many problems as do the disadvantaged; girls tend to report more problems (within their respective social status) than do boys.

When the problems for each group are ranked according to the percentage of problems reported within the concerned subgroup, a striking similarity may be observed. This is summarized in Table 15. The top five problems listed by the DM's are education (28%), financial (13%), job choice and placement (11%), performance (11%), and physical health (8%). The NDM's top three problems were identical and occurred in the following proportions respectively: 34%, 16%, 12%. Fourth most frequently listed was ability (9%), and fifth, competition (6%). For girls, the top two were the same, education (23% and 20%), respectively, for disadvantaged and nondisadvantaged and performance (12% and 14%). For DF's, the third most frequent anticipated problem is financial (11%), followed by ability (10%) and job choice and placement (9%), while for NDF's the third problem is job choice and placement (12%), followed by a tie between financial and ability (10%).

In general, the spread of problems listed is fairly large, but the four groups show striking similarities in their ordering of the most frequently listed anticipated blocks to their career plans. The only point of difference appears to be the tendency of the nondisadvantaged to list more problems than the disadvantaged. This might stem from the greater awareness of potential blocks on the part of the nondisadvantaged or be the result of greater expectations and thus greater pressures on them to achieve via scholastic success. The overall similarity of problems, however, is consistent with the trend observable in much of the data; namely, that more similarities than differences appear to exist in the educational-vocational perceptions and aspirations of disadvantaged and nondisadvantaged junior high school students.

Summary. For students observed in this study, the only variable examined on which father's educational level seems to have much impact concerns educational aspiration, while mother's educational level seems to be more substantially related to the plans and attitudes of their daughters than their sons. The results of the general trends of the correlations might be tentatively interpreted as indicating that males look to their fathers for educational modeling and females to their mothers, but that this modeling does not appear to have as strong an effect on the disadvantaged student as on the nondisadvantaged. It should be noted, however, that these implications should be moderated by the caution about the interpretation of zero order correlations discussed at the beginning of this chapter.

Both groups have similar, high levels of occupational aspiration, and are considering similar occupational fields, though the level considered by the nondisadvantaged is skewed toward the professional-managerial level whereas the disadvantaged consider a wider range of levels. Both groups perceive similar potential blocks to their career plans.

TABLE 15

RANK OF ANTICIPATED PROBLEMS ACCORDING TO GROUP

Rank	Group			
	DM	NDM	DF	NDF
1	education	education	education	education
2	financial	financial	performance	performance
3	job choice and placement opportunity	job choice and placement opportunity	financial	job choice and placement opportunity
4	performance	ability	ability	financial (tie) ability (tie)
5	physical health	competition	job choice and placement opportunity	

CHAPTER IV

CONCLUSIONS AND IMPLICATIONS

This study had as its main objective the exploration of the educational-vocational perceptions and expectations of disadvantaged and nondisadvantaged junior high school students. Observation of today's society strongly suggests that much of the social ineffectiveness and misery that exists is related to the inability of some individuals to find employment in which they can productively meet an aspect of society's needs and at the same time find a measure of personal satisfaction. Furthermore, on the basis of somewhat unsystematic observation, there is reason to believe that a certain proportion of vocational ineffectiveness and personal dissatisfaction is passed along from one generation to the next in the affected subcultures of our society since vocational disadvantagement seems to have a heavy ethnic component. To some extent this investigation can be seen as an exploration into the degree to which parents suffering from a vocational malaise actually do serve as undesirable vocational models for their offspring. One aspect of the degree to which youngsters of the junior high school age report themselves to be overwhelmed by social events whose personal consequences they cannot control was examined. If these youth are severely overwhelmed by the time they reach the junior high school period the implications for remediation are different from what they would be should the impact on vocational planning of being disadvantaged be felt later on.

To provide a contrast to the disadvantaged group observed in this study, a sample of students judged to be nondisadvantaged was selected and studied in the same way as the disadvantaged students. Specifically, the two groups were contrasted with respect to similarities in their personal perceptions of the vocational world, their vocational maturity, their perception of school as a useful means through which to implement a vocational plan, their vocational considerations with respect to both occupational field and level, the relationship between these considerations and their parents' occupational activities, and anticipated problems in implementing choices.

In order to provide a national scope to the project, samples of both disadvantaged and nondisadvantaged students were selected from four cities in different geographic regions of the United States, and similarities and differences regarding the samples according to geographic origin were examined to provide some data related to the degree to which the impact on career development of being disadvantaged is general across the country.

Certain limitations in the design of the study should be pointed out. The sampling, though large and determined regionally, may not be sufficiently diverse to permit generalization to the entire United States junior high school population. Secondly, this study was conceived as a hypothesis generating rather than a hypothesis testing study, and, thus, does not permit rigorous conclusions to be drawn. Third, many zero order correlations were evident in this study. Such data possess inherent limitations and may lead to inappropriate notions of causality unless viewed with extreme caution.

COMMUNITY DIFFERENCES

The data presented in the Results Chapter (Chapter III) and in the Appendices indicate that substantial differences exist as a result of being classified as disadvantaged in different communities. In one community (D), relatively little difference between the educational, income, and other attributes important to the determination of social status exists between the disadvantaged and nondisadvantaged groups. In another community (B), these differences appear to be extensive, even though these groups were identified by school officials in the same way. Furthermore, in some style of life attributes, the disadvantaged in Community D were nearly equal to, or even superior to, the nondisadvantaged in Community B.

What Hess (1968) has said (summarized in Chapter I, p. 7) about the diverse circumstances which contribute to being disadvantaged is relevant. According to Hess there are social, educational, economic, physical, psychological, and intellectual kinds of disadvantages. Membership in a group with little social prestige and potency may contribute to a disadvantaged status regarding educational achievement in one ethnic group while in another it might be a spur to greater achievement.

The implication of the observations of differences between communities in this study seems clear. Evidently being disadvantaged is relevant to the individual's social context. A person sees himself relative to the world of his local community. Since broad generalizations about either the nature of disadvantagement or its relation to educational-vocational antecedents, attributes, or aspirations cannot be made, an agency, institution, or governmental unit wishing to engage in program development to deal with the effects of disadvantagement, would be wise to first conduct a local demographic survey to accumulate local data about the nature of the local implications of disadvantagement.

DISADVANTAGED AND NONDISADVANTAGED COMPARISONS

While certain important differences between disadvantaged and nondisadvantaged students were observed in this study, the differences did not appear as frequently as might have been expected and when they appeared, they were often relatively small from a practical point of view. Furthermore, surprisingly, the differences sometimes occurred in a direction that favored the disadvantaged *Ss*. For example, the disadvantaged students' educational aspirations were generally lower than those of nondisadvantaged *Ss*, but the aspirations of an overwhelming number of students in both groups was high school graduation as a minimum level of education. Concerning the amount of thought given to school plans, the

disadvantaged students' educational aspirations were generally lower than those of nondisadvantaged *Ss*, but the aspirations of an overwhelming number of students in both groups was high school graduation as a minimum level of education. Concerning the amount of thought given to school plans, the disadvantaged thought more than the nondisadvantaged *Ss*. Similarly, disadvantaged *Ss* gave more thought to their future job, viewed teachers in a more favorable light, and reported that school was easier, than did nondisadvantaged *Ss*. The two groups were similar in their perception of the amount of freedom possessed in occupational choice, and in their report of the adequacy and quality of family-child relationships. The nondisadvantaged goup exceeded the disadvantaged group in Vocational Maturity scores. No special problems were anticipated by the disadvantaged, and those anticipated were reported in proportion similar to the nondisadvantaged *Ss*.

On the face of the findings, the two groups appear to be similar. There is some precedent in the literature for the conclusion that the vocational and educational perceptions and attitudes of disadvantaged and nondisadvantaged students are similar. In a study of junior high school students, Soares and Soares (1968) found no major differences and a few minor ones favoring the disadvantaged students. Similarly, Deutsch (1960) has suggested that differences in the frequency of effective responses to scholastic problems of disadvantaged and nondisadvantaged children diverge over time. This implies that at a relatively early time in the educational process differences between the two groups in attitudinally related behaviors would not be pronounced. Ginzberg (1951) *et al.*, found that the career development of lower class boys was faster than for upper class.

While it is tempting to emphasize the conclusion that the disadvantaged students are not substantially handicapped in their educational-vocational attitudes and expectations at the junior high school level, and while that notion probably has some validity, the possibility that the disadvantaged students are responding in a naive or socially acceptable manner must not be overlooked. For example, the likelihood that the disadvantaged students find school easier than the nondisadvantaged students makes little sense unless one considers that the nondisadvantaged students may find school harder because they are concerned with the level of their performance while the disadvantaged students are satisfied merely to pass. Another possible explanation also exists which is that teachers of disadvantaged students may ease academic standards and thus contribute to a less threatening academic life for these students.

The findings concerning the vocational plans, preferences, and considerations of the two kinds of students are more encouraging than expected. The observation that disadvantaged students at the junior high school level still consider themselves to possess opportunities approximately comparable to those of nondisadvantaged students may indicate that disadvantaged students continue to be accessible to the efforts of the educational system to prepare them for productive and satisfying vocational lives, despite the many other handicaps they have acquired in their development this far. If subsequest research bears these preliminary findings out, it would seem that programs should be developed which enable the disadvantaged youth to acquire vocationally relevant skills that can be used at the time of high school graduation. If society actively seeks to employ these graduates, some of the vocational and social alienation observed in the parents of disadvantaged youth may be eliminated in the coming generation. It is encouraging

to observe the realtively small degree to which the disadvantaged Ss seem to use their parental vocational behaviors as models for their own plans and considerations.

IMPLICATIONS FOR RESEARCH

The results of this study suggest certain problems that warrent investigation. For example, since the results reported here indicate very little difference between the perceptions of disadvantaged and nondisadvantaged students, a longitudinal study aimed at identifying developmentally the point at which the two groups begin to diverse might be useful in suggesting programs to prevent the formation of attitudes negative to goal career development in the disadvantaged. Certainly, it is clear from other studies, that dropout rates increase heavily in ninth and tenth grades. Since it has been observed that the attitudes of the disadvantaged are similar to those of the nondisadvantaged only a year or two before, questions about environmental events that might be related to the sudden change can be raised.

In this study student attitudes and expectations have been observed. A study examining the cumulative effects of various environmental deficits on scholastic achievement would be useful in determining specific remedial techniques and possible ways to avoid the deficiencies themselves.

A third type of study that might be of interest has to do with the effects of training parents to function more effectively. A study comparing the scholastic progress of students whose parents participate in a parental training program with those whose parents do not participate seems feasible. A combination of didactic and counseling approaches to the fostering of the understanding of the emotional and physical development of children compared with the progress of a group of students whose parents were "untreated" would test the feasibility of parental change in brining about greater student effectiveness. Such topics as normal development, anticipation of problems with authority figures, and the identification and anticipation of potentially difficult stages of development might be included, along with counseling for parents who need more individual support at any particular point in time.

Along similar lines a study might be designed to examine the effects of exposure to work responsibilities at an early age on the later development of positive work attitudes. No definitive studies concerning the relative merits of the acquistion of early work habits now exist.

PROGRAM IMPLICATIONS

Several specific implications for the development of programs may be derived from the general findings of this study, and speculation about still other programs is possible. The most obvious development concerns the revelance of school to the later life of the students. It seems clear that for the majority of the students in this study, both disadvantaged and nondisadvantaged, school is still seen as the major general pathway to a satisfying and successful later life. However, the specific relation is not apparently clear to these students, and it is easy to speculate that they will soon become disillusioned about the way the tasks they perform in their daily school life relate to their

long range goals and life out of school. Much of what goes on in school may be irrelevant, and these activities should be identified and changed. But a good portion of school activities is related to later achievement. These cogent activities should be specifically made clear to the student whenever possible, both by the classroom teacher searching for illustrations of practical applications of skills learned, and by the various specialists on the school staff. Of particular importance is the presence of counseling specialists to impress upon students the places where the skills learned in school are important in very practical ways.

A corollary of the recommendation just made lies in a greater emphasis being placed in the identification of the range of educational pathways that exist. Too many students see college or university education as the only satisfactory educational objectives, when, in fact, other objectives may be more likely to lead to the appropriate use of skills and talents vocationally. Again, both teachers and counselors must be aware of the pathways that exist and find ways to effectively communicate their knowledge about these to the students.

The list of anticipated problems elicited from the students in this study suggests the systematic inquiry about perceived problems as a standard guidance technique. School surveys might be conducted at regular intervals. On the basis of such information, counselors and other school personnel could then develop specific programs designed to help students deal with and understand issues related to problems with which the students themselves are concerned.

The currently increasing development of vocational exploration courses should be expanded and polished. These courses can be tailored to accomplish a number of objectives, such as the expansion of occupational horizons, development of self-knowledge, anticipation of problems, development of personal resources, and practical implications of various school subjects. It should be clearly understood, however, that the objective of such courses is not the specification of a particular occupational educational choice. Such choices are highly unreliable and often detrimental, for even older youth, and especially so for junior high school age students. The objectives are more behavioral, that is, the fostering of skills that will later be of use to the student in making wise educational and vocational choices and implementing them.

Finally, some efforts should be made by the schools to do more to help youngsters develop skills that will be useful to them in later tasks, and in leading generally satisfying lives. Such programs run successfully by the schools might go a long way toward maintaining the importance of school in the eyes of the youngsters beyond the age when it begins to seem irrelevent, and might make the school a place to turn to for help rather than a place to be avoided. Specifically, voluntary after school and summer programs might be conducted in such activities as pet care, first aid, cooking and sewing, the repair of common household items, shopping skills, public speaking, dramatics, music, art, typing, and many others. Children might be encouraged to bring their own pets to such "classes" for grooming, or their own broken bicycles or toys to work on, or some community spirited businessmen might donate old items in disrepair to be fixed. Such skills as these middle class

children are more likely than disadvantaged to acquire in the normal course of daily life, but these skills are important to living effectively in the mainstream of today's society.

SUMMARY

In comparing the educational-vocational antecedents, perceptions, expectations, and aspirations of disadvantaged and nondisadvantaged junior high school students in four major geographic areas of the country, several observations may be made. First, the attributes of disadvantagement vary extensively from community to community. Secondly, despite these community variations it is possible to note that fewer differences in educational attitudes and vocational considerations, plans, preferences and influences between the two kinds of students exist than might have been thought heretofore. The main implication suggested by these results is that since the significance of the availability of relevant educational possibilities for both groups increases sharply at the secondary school level, care must be taken not to lose the potential of the disadvantaged students through the unavailability of appropriate educational pathways.

APPENDICES

APPENDIX A

1960 CENSUS TRACT DATA FOR DISADVANTAGED AND NONDISADVANTAGED SCHOOL DISTRICTS IN COMMUNITIES A, B, C, AND D

Category	Community and School Districts							
	A		B		C		D	
	1	2	1	2	1	2	1	2
IV. Education								
Median years of school completed (adults)	8.4	11.2	8.3	12.5	7.6	10.7	9.7	11.4
V. Housing								
Owner occupied: White	33%	99.5%	38%	98.6%	92%	95%	98%	99.7%
Non-white	67%	.5%	62%	1.4%	8%	5%	2%	.3%
Median property value	$ 6,218	14,445	7,750	13,125	6,000	13,293	10,200	11,750
Renter occupied: White	34%	98.8%	26.8%	90.9%	69%	88.7%	96.3%	99.6%
Non-white	66%	1.2%	73.2%	9.1%	31%	11.3%	3.7%	.4%
Median gross rent	$ 54	78	53	Not reported	69	86	64	78
Number of persons per room (by percentage)								
.50 or less	36.1%	56.6%	31.9%	31.7%	43.9%	61.5%	44.3%	58.0%
.51 - .75	16.3	21.4	21.3	34.0	22.0	18.9	21.5	22.4
.76 - 1.00	28.6	14.9	20.5	29.3	21.1	13.8	21.5	15.2
1.00 or more	19.0	7.1	26.3	5.8	13.0	5.8	12.7	4.4

1 = Disadvantaged school
2 = Nondisadvantaged school
U.K. = United Kingdom

APPENDIX A

1960 CENSUS TRACT DATA FOR DISADVANTAGED AND NONDISADVANTAGED SCHOOL DISTRICTS IN COMMUNITIES A, B, C, AND D

Category	Community and School Districts							
	A		B		C		D	
	1	2	1	2	1	2	1	2
I. Population								
Total	35,281	35,262	33,516	22,057	56,129	65,194	34,673	26,272
White	37%	99%	23%	97%	77.8%	88.5%	95.6%	99.5%
Non-white	63%	1%	77%	3%	22.2%	11.5%	4.4%	.5%
Total foreign stock	701	4,900	543	987	4,946	6,863	9,186	6,439
Three largest ethnic groups:	Germany Ireland U.S.S.R	Germany Italy Ireland	Italy Germany U.K.	Italy Germany U.K. & U.S.S.R.	Germany Italy U.K.	Germany U.K. Italy	Italy U.S.S.R. Germany & Mexico	Italy Germany U.K.
II. Income								
Median income of family	$ 3,390	$ 7,328	$ 3,056	$ 7,193	$ 4,712	$ 7,539	$ 5,542	$ 6,269
III. Employment								
Male Employed (actual numbers)	7,354	8,831	6,684	5,682	13,305	16,589	8,125	6,902
Males in labor force (by percentage)	67.1%	76.8%	61.3%	90.2%	76.7%	77.7%	76.5%	74.3%
Professional, technical, kindred	3.0	15.5	3.3	15.8	2.8	16.5	5.5	9.9
Managers, office, proprietors (farm)	2.9	17.7	4.8	22.2	4.7	12.4	6.8	13.1
Clerical	4.4	10.2	6.3	8.7	14.0	9.3	9.5	12.2
Sales	3.0	12.1	3.6	20.6	2.9	7.8	6.5	8.3
Crafts, foremen	12.9	14.8	14.8	35.4	21.0	17.3	21.6	23.8
Operatives, kindred workers	23.0	15.6	31.6	9.6	28.1	17.2	25.1	16.3
Household	.4	0.00	.8	.1	.1	.2	.1	.0
Service	20.3	3.6	12.5	3.8	6.7	5.9	8.9	6.3
Labor except mine	17.0	3.3	14.1	2.1	12.8	5.4	11.0	6.1
Males unemployed (by percentage)	10.4	3.2	7.7	.8	9.4	4.4	5.7	2.4
Female employed (actual numbers)	5,457	5,454	4,560	2,136	6,937	9,461	4,474	4,057
Females in labor force (by percentage)	40.7%	34.1%	39.8%	32.2%	35.8%	37.5%	35.5%	36.4%
Professional, technical, kindred	5.7	17.5	9.6	19.9	3.5	16.5	6.3	11.3
Managers, office, proprietors (farm)	2.0	5.1	1.9	4.1	1.9	4.5	2.7	3.9
Clerical	12.5	36.7	11.8	49.7	22.9	30.2	34.2	45.0
Sales	3.6	11.0	4.3	7.8	8.4	7.5	7.6	10.3
Crafts, foremen	.8	1.0	1.1	1.5	1.9	1.7	1.5	1.7
Operatives	13.5	8.0	11.8	3.4	26.8	11.9	18.2	7.5
Household	25.5	4.0	28.5	5.8	4.4	7.7	2.8	3.0
Service	23.2	8.3	24.1	6.0	14.2	11.5	18.3	10.5
Labor except mine	1.0	.3	1.3	0.0	.5	.5	1.0	.6
Females unemployed (by percentage)	5.9	3.4	9.3	1.9	8.6	3.3	3.8	2.3

(cont.)

APPENDIX B

INFORMATION REGARDING EACH PARTICIPATING SCHOOL

School Personnel	Community A		Community B		Community C		Community D	
	Disadv.	Nondis.	Disadv.	Nondis.	Disadv.	Nondis.	Disadv.	Nondis.
Teaching experience								
Less than 1 year	5	2	7	9	4	6	4	
1 year	0	6	4	8	3	3	6	8
2, 3 or 4 years	5	4	14	13	1	6	11	12
5-9 years	8	3	25	5	10	7	23	10
10-15 years	2	1	12	4	5	8	6	15
16-30 years	15	8	4	6	11	9	2	4
30 or more years	12	12	1	6		20	2	3
Teacher Service in this School								
New this year	5	5	15	15	5	13	5	7
1 year	1	6	12	9	2	8	10	4
2, 3 or 4 years	10	4	39	10	19	7	10	20
5-9 years	10	2		12	10	7	20	13
10-15 years	4	3		5	8	3	6	5
16-30 years	9	10				3	4	3
30 or more years	6	6					0	0

(Numbers in parentheses indicate estimates)

APPENDIX B

INFORMATION REGARDING EACH PARTICIPATING SCHOOL

Student Information	Community A		Community B		Community C		Community D	
	Disadv.	Nondis.	Disadv.	Nondis.	Disadv.	Nondis.	Disadv.	Nondis.
1966 Student enrollment								
7th grade	274	234	650	560	318	357	340	391
8th grade	322	248	511	501	274	375	334	420
9th grade	291	319	489	459	300	323	335	449
Total enrollment	887	801	1650	1520	892	1055	1060	1260
Pupil-teacher ratio	26	___	27	29.8	21.2	25	19.8	22.7
Rate of absenteeism per day	9%	4%	5%	3%	23%	9%	19%	(8%)
Percent of students who graduate from high school	(78%)	95+%	___	99%	25%	(75%)	48%	(80%)
Percent of students who continue schooling beyond high school	(15%)	70-75%	___	85%	4%	33 1/3-50%	25%	(35%)
School Personnel								
Teacher education								
Less than bachelor's degree	0	0	1	0	5	3	0	0
Bachelor's degree but less than Master's	28	27	58	36	31	29	44	36
Master's degree but less than PH. D.	17	9	17	15	8	9	10	22
School Program								
Facilitation of occupational goal development								
Special courses about the "world of work"	x							
Counseling program	x	x	x	x	x	x	x	x
Testing program	x				x	x	x	x
Specialized inventories					x			
Extracurricular activities					x			
Field trops to industries and business	x				x			
Speakers	x				x			
Books and other individually used items					x			

(cont.)

APPENDIX C

NUMBER OF STUDENTS IN THE DISADVANTAGED AND NONDISADVANTAGED SCHOOLS AND THE NUMBER OF STUDENTS NOMINATED AS NOT FITTING THE SCHOOL DESIGNATION

Community	Disadvantaged School	Nondisadvantaged Students in Disadvantaged School	Nondisadvantaged School	Disadvantaged Students in Nondisadvantaged School
A	321	35 (11%)	313	15 (5%)
B	261	64 (25%)	346	10 (3%)
C	263	30 (11%)	267	24 (9%)
D	302	19 (6%)	297	15 (5%)
Total	1147	148 (13%)	1223	64 (5%)

APPENDIX D

PERCENT OF STUDENTS OLDER THAN THE NORMAL AGE GROUP FOR GRADES SEVEN AND NINE

		Disadvantaged		Nondisadvantaged	
	City	Total Response to item	Percent of total	Total Response to item	Percent of total
7th Grade Boys Older Than 12 or 13 Years of Age	A	69	26.09%	80	8.75%
	B	60	28.33	78	11.54
	C	70	40.00	59	25.42
	D	81	11.11	63	3.18
7th Grade Girls Older Than 12 or 13 Years of Age	A	90	6.67%	71	5.63%
	B	62	6.45	94	6.38
	C	88	18.18	71	5.63
	D	68	5.88	87	0.00
9th Grade Boys Older Than 14 or 15 Years of Age	A	70	25.71%	74	14.86%
	B	65	10.77	70	10.00
	C	53	15.09	76	17.11
	D	72	6.94	68	0.00
9th Grade Girls Older Than 14 or 15 Years of Age	A	88	10.23%	87	3.45%
	B	74	10.81	104	.96
	C	51	7.84	60	11.67
	D	80	3.75	78	0.00

APPENDIX E

COMPARISON BY CITY OF THE DISADVANTAGED AND NONDISADVANTAGED STUDENTS REGARDING THE NUMBER OF PEOPLE LIVING AT HOME

City	Number of People	Disadvantaged Total Response to Item	Disadvantaged Percent of Total	Nondisadvantaged Total Response to Item	Nondisadvantaged Percent of Total
A		316		311	
	1 - 2		15.51%		11.25%
	3		14.24		30.23
	4		17.41		27.01
	5		15.82		15.76
	6		24.68		11.25
	7 or more		12.34		4.50
			100.00%		100.00%
B		255		346	
	1 - 2		10.59%		15.03%
	3		11.76		36.13
	4		10.98		28.04
	5		13.73		13.58
	6		29.41		5.49
	7 or more		23.53		1.73
			100.00%		100.00%
C		262		263	
	1 - 2		11.45%		18.63%
	3		12.60		20.15
	4		14.89		23.95
	5		16.03		17.49
	6		23.28		11.79
	7 or more		21.76		7.99
			100.00%		100.00%
D		299		295	
	1 - 2		11.71%		17.63%
	3		16.72		22.71
	4		21.07		24.75
	5		18.73		17.29
	6		12.71		8.81
	7 or more		19.06		8.81
			100.00%		100.00%

APPENDIX F

COMPARISON BY CITY OF DISADVANTAGED AND NONDISADVANTAGED STUDENTS REGARDING THE PARENTS LIVING AT HOME

City	Number of Parents at Home	Disadvantaged Total Response to Item	Disadvantaged Percent of Total	Nondisadvantaged Total Response to Item	Nondisadvantaged Percent of Total
		264		302	
A	Both		39.39%		79.80%
	Mother only		51.14		16.23
	Father only		3.41		3.31
	None		6.06		.66
			100.00%		100.00%
		225		344	
B	Both		54.22%		91.57%
	Mother only		38.22		7.56
	Father only		5.78		.87
	None		1.78		0.00
			100.00%		100.00%
		234		259	
C	Both		61.54%		77.99%
	Mother only		30.77		17.76
	Father only		5.13		3.86
	None		2.56		.39
			100.00%		100.00%
		276		282	
D	Both		68.84%		79.43%
	Mother only		26.09		16.67
	Father only		2.90		1.77
	None		2.17		2.13
			100.00%		100.00%

APPENDIX G

COMPARISON BY CITY OF DISADVANTAGED AND NONDISADVANTAGED STUDENTS REGARDING FATHER'S SCHOOLING

City	Number of Years of School	Disadvantaged		Nondisadvantaged	
		Total Response to Item	Percent of Total	Total Response to Item	Percent of Total
		113		220	
A	12 or less		90.27%		40.00%
	13 or more		9.73		60.00
			100.00%		100.00%
		130		286	
B	12 or less		90.77%		52.45%
	13 or more		9.23		47.55
			100.00%		100.00%
		120		194	
C	12 or less		97.50%		61.86%
	13 or more		2.50		38.14
			100.00%		100.00%
		151		208	
D	12 or less		82.78%		74.52%
	13 or more		17.22		25.48
			100.00%		100.00%

APPENDIX H

COMPARISON BY CITY OF DISADVANTAGED AND NONDISADVANTAGED STUDENTS REGARDING MOTHER'S SCHOOLING

City	Number of Years of School	Disadvantaged		Nondisadvantaged	
		Total Response to Item	Percent of Total	Total Response to Item	Percent of Total
A		178		254	
	12 or less		89.89%		47.64%
	13 or more		10.11		52.36
			100.00%		100.00%
B		162		302	
	12 or less		93.20%		61.92%
	13 or more		6.80		38.08
			100.00%		100.00%
C		145		210	
	12 or less		97.24%		74.76%
	13 or more		2.76		25.24
			100.00%		100.00%
D		186		239	
	12 or less		90.32%		82.00%
	13 or more		9.68		18.00
			100.00%		100.00%

APPENDIX J

COMPARISON BY CITY OF DISADVANTAGED AND NONDISADVANTAGED FAMILIES REGARDING THE TYPE AND OWNERSHIP OF HOUSING

City	Type and Ownership of Housing	Disadvantaged Total Response to Item	Disadvantaged Percent of Total	Nondisadvantaged Total Response to Item	Nondisadvantaged Percent of Total
		243		281	
A	Rented		67.90%		17.44%
	Self-owned		32.10		82.56
			100.00%		100.00%
		149		240	
	Apartment		40.94%		9.17%
	House		59.06		90.83
			100.00%		100.00%
		220		291	
B	Rented		50.00%		8.93%
	Self-owned		50.00		91.07
			100.00%		100.00%
		121		258	
	Apartment		38.02%		1.16%
	House		61.98		98.84
			100.00%		100.00%
		247		236	
C	Rented		67.61%		31.78%
	Self-owned		32.39		68.22
			100.00%		100.00%
		135		167	
	Apartment		10.37%		10.18%
	House		89.63		89.82
			100.00%		100.00%
		276		271	
D	Rented		45.29%		22.14%
	Self-owned		54.71		77.86
			100.00%		100.00%
		231		228	
	Apartment		16.88%		3.95%
	House		83.12		96.05
			100.00%		100.00%

APPENDIX K

COMPARISON BY CITY OF DISADVANTAGED AND NONDISADVANTAGED STUDENTS REGARDING THE NUMBER OF YEARS LIVED IN PRESENT HOME

City	Number of Years	Disadvantaged		Nondisadvantaged	
		Total Response to Item	Percent of Total	Total Response to Item	Percent of Total
		297		3u4	
A	1 - 3		42.76%		32.57%
	4 - 6		16.50		19.41
	7 or more		40.74		48.03
			100.00%		100.00%
		244		346	
B	1 - 3		43.44%		23.99%
	4 - 6		2. 87		17.34
	7 or more		2ь.69		58.67
			100.00%		100.00%
		258		253	
C	1 - 3		44.19%		24.90%
	4 - 6		12.40		13.44
	7 or more		43.41		61.66
			100.00%		100.00%
		288		295	
D	1 - 3		40.28%		28.14%
	4 - 6		21.18%		17.28%
	7 or more		38.54		54.57
			100.00%		100.00%

APPENDIX L

COMPARISON BY CITY OF THE DISADVANTAGED AND NONDISADVANTAGED STUDENTS REGARDING THE NUMBER OF HOUSES LIVED IN

City	Number of Houses	Disadvantaged: Total Response to Item	Disadvantaged: Percent of Total	Nondisadvantaged: Total Response to Item	Nondisadvantaged: Percent of Total
		304		309	
A	1 - 2		32.57%		47.25%
	3 - 4		35.86		28.48
	5 - 6		19.08		16.18
	7 or more		12.50		8.09
			100.01%		100.00%
		246		342	
B	1 - 2		25.20%		44.44%
	3 - 4		41.46		32.75
	5 - 6		19.51		10.23
	7 or more		13.82		12.57
			99.99%		99.99%
		251		250	
C	1 - 2		40.24%		53.20%
	3 - 4		27.49		29.20
	5 - 6		16.33		10.80
	7 or more		15.94		6.80
			100.00%		100.00%
		283		291	
D	1 - 2		39.22%		46.74%
	3 - 4		31.80		29.21
	5 - 6		15.90		15.81
	7 or more		13.07		8.25
			99.99%		100.01%

APPENDIX M

COMPARISON BY CITY OF THE DISADVANTAGED AND NONDISADVANTAGED STUDENTS REGARDING THE NUMBER OF DIFFERENT CITIES LIVED IN

City	Number of Cities	Disadvantaged		Nondisadvantaged	
		Total Response to Item	Percent of Total	Total Response to Item	Percent of Total
		300		308	
A	1		71.67%		67.21%
	2		20.33		16.56
	3 or more		8.00		16.23
			100.00%		100.00%
		244		342	
B	1		65.98%		49.42%
	2		24.18		25.73
	3 or more		9.84		24.85
			100.00%		100.00%
		249		249	
C	1		79.52%		71.49%
	2		12.05		18.07
	3 or more		18.43		10.44
			100.00%		100.00%
		282		290	
D	1		58.87%		58.97%
	2		23.40		23.79
	3 or more		17.73		17.24
			100.00%		100.00%

APPENDIX N

COMPARISON BY COMMUNITY, GRADE LEVEL, AND SEX OF MEANS AND STANDARD DEVIATIONS FACTOR I SCORES FOR DISADVANTAGED AND NONDSIADVANTAGED STUDENTS

			Factor I Teacher Student Relationship			
			Disadvantaged		Nondisadvantaged	
Community	Level	Sex	Mean	St. Dev.	Mean	St. Dev.
A	7	Male	70.19	15.98	63.34	16.05
A	7	Female	74.35	12.54	66.32	18.74
A	9	Male	65.11	14.91	61.58	16.48
A	9	Female	67.53	14.34	63.98	14.71
B	7	Male	66.42	16.99	73.01	15.03
B	7	Female	74.34	15.33	75.72	15.65
B	9	Male	68.48	14.64	66.67	14.74
B	9	Female	65.76	14.46	68.85	12.10
C	7	Male	78.97	14.44	71.61	12.58
C	7	Female	82.44	12.32	76.86	12.66
C	9	Male	73.06	14.99	65.95	14.03
C	9	Female	74.26	12.80	68.07	15.15
D	7	Male	75.30	13.59	70.67	13.94
D	7	Female	76.90	13.93	67.16	15.21
D	9	Male	73.76	11.43	69.60	16.16
D	9	Female	75.44	10.87	71.37	13.17

APPENDIX O

COMPARISON BY COMMUNITY, GRADE LEVEL, AND SEX OF MEANS AND STANDARD DEVIATIONS FACTOR II SCORES FOR DISADVANTAGED AND NONDISADVANTAGED STUDENTS

			Factor II Work and the Future			
			Disadvantaged		Nondisadvantaged	
Community	Grade Level	Sex	Mean	St. Dev.	Mean	St. Dev.
A	7	Male	35.76	6.13	37.84	4.71
A	7	Female	36.87	6.21	39.42	3.32
A	9	Male	38.14	5.02	39.40	3.21
A	9	Female	38.83	5.16	40.13	2.68
B	7	Male	36.78	5.82	39.58	3.54
B	7	Female	38.95	5.35	40.39	2.81
B	9	Male	38.37	5.63	39.66	3.32
B	9	Female	40.19	2.56	40.60	1.90
C	7	Male	38.24	4.71	38.54	4.96
C	7	Female	38.56	4.48	39.65	3.63
C	9	Male	38.74	3.77	39.10	4.27
C	9	Female	39.37	3.83	39.92	2.45
D	7	Male	37.73	5.68	40.14	3.06
D	7	Female	37.63	5.10	39.92	3.83
D	9	Male	39.43	2.92	39.29	4.03
D	9	Female	39.83	2.83	40.56	2.19

APPENDIX P

COMPARISON BY COMMUNITY, GRADE LEVEL, AND SEX OF MEANS AND STANDARD DEVIATIONS FACTOR III SCORES FOR DISADVANTAGED AND NONDISADVANTAGED STUDENTS

Community	Grade Level	Sex	Factor III Family-Child Relationship			
			Disadvantaged		Nondisadvantaged	
			Mean	St. Dev.	Mean	St. Dev.
A	7	Male	44.63	7.66	43.90	8.83
A	7	Female	43.34	8.35	44.54	10.22
A	9	Male	44.19	6.96	40.87	9.26
A	9	Female	41.36	9.50	43.33	9.00
B	7	Male	43.15	8.25	46.54	7.38
B	7	Female	47.08	7.21	44.13	10.05
B	9	Male	44.96	5.94	43.71	8.15
B	9	Female	45.20	7.97	45.66	4.59
C	7	Male	45.24	8.00	44.31	8.30
C	7	Female	46.53	9.89	45.89	9.32
C	9	Male	45.70	6.37	42.49	8.95
C	9	Female	42.57	10.77	43.03	7.50
D	7	Male	45.10	11.49	43.89	8.73
D	7	Female	43.96	8.53	44.32	8.27
D	9	Male	42.85	8.47	43.77	9.00
D	9	Female	44.69	8.92	44.16	9.95

APPENDIX Q

COMPARISON BY COMMUNITY, GRADE LEVEL, AND SEX OF MEANS AND STANDARD DEVIATIONS FACTOR IV SCORES FOR DISADVANTAGED AND NONDISADVANTAGED STUDENTS

			Level of Difficulty Factor IV with School Work			
			Disadvantaged		Nondisadvantaged	
Community	Level	Sex	Mean	St. Dev.	Mean	St. Dev.
A	7	Male	16.69	5.89	13.94	5.48
A	7	Female	18.22	5.71	14.48	5.70
A	9	Male	16.22	4.85	14.61	5.01
A	9	Female	16.59	4.81	13.25	4.88
B	7	Male	17.98	5.26	18.44	5.05
B	7	Female	18.58	5.17	17.30	5.77
B	9	Male	18.34	5.34	15.61	4.72
B	9	Female	17.35	5.70	15.41	4.14
C	7	Male	17.97	5.50	16.75	4.82
C	7	Female	20.18	5.40	17.06	4.61
C	9	Male	18.80	3.94	16.04	3.78
C	9	Female	19.33	4.38	15.05	4.81
D	7	Male	17.63	5.00	15.75	4.16
D	7	Female	17.53	5.06	16.09	4.36
D	9	Male	17.40	4.57	16.52	5.06
D	9	Female	16.85	4.84	17.25	4.10

APPENDIX R

COMPARISON BY COMMUNITY OF DISADVANTAGED AND NONDISADVANTAGED MALE STUDENTS REGARDING AMOUNT OF SCHOOOING DESIRED BY STUDENT

		MALE				
		Disadvantaged		Nondisadvantaged		
Community	Years of School Desired	Total N for Item	Percent of Total	Total N for Item	Percent of Total	X^2
		118		137		
A	6-11 years		1.69%		1.46%	23.96**
	12 years		44.07		9.49	
	13-15 years		11.02		11.68	
	16 years		43.22		77.37	
		111		143		
B	6-11 years		.90%		0.00%	31.24**
	12 years		31.53		7.69	
	13-15 years		16.22		5.60	
	16 years		51.35		86.71	
		120		126		
C	6-11 years		2.50%		0.00%	40.02**
	12 years		45.83		16.67	
	13-15 years		15.83		7.14	
	16 years		35.84		76.19	
		144		128		
D	6-11 years		.69%		1.56%	7.59*
	12 years		26.39		13.28	
	13-15 years		20.14		15.63	
	16 years		52.78		69.53	

* Significant at .05 level
** Significant at .001 level

APPENDIX R

COMPARISON BY COMMUNITY OF DISADVANTAGED AND NONDISADVANTAGED FEMALE STUDENTS REGARDING AMOUNT OF SCHOOLING DESIRED BY STUDENT

		FEMALE				
		Disadvantaged		Nondisadvantaged		
Community	Years of school Desired	Total N for Item	Percent of Total	Total N for Item	Percent of Total	X^2
		167		150		
A	6-11 years		.62%		2.67%	33.16**
	12 years		37.27		12.00	
	13-15 years		20.50		11.33	
	16 years		41.61		74.00	
		122		193		
B	6-11 years		0.00%		1.04%	3.38
	12 years		20.49		8.81	
	13-15 years		6.56		21.24	
	16 years		72.95		68.91	
		96		123		
C	6-11 years		8.33%		1.62%	8.86*
	12 years		39.58		26.02	
	13-15 years		21.88		24.39	
	16 years		30.21		47.97	
		146		163		
D	6-11 years		.69%		.61%	24.18**
	12 years		44.52		16.57	
	13-15 years		19.86		27.61	
	16 years		34.93		55.21	

* Significant at .05 level
** Significant at .001 level

APPENDIX S

COMPARISON BY COMMUNITY OF DISADVANTAGED AND NONDISADVANTAGED SEVENTH GRADE MALE STUDENTS REGARDING AMOUNT OF CONSIDERATION GIVEN TO SCHOOL PLANS

Community	Amount of Thought	Disadvantaged Total N for Item	Disadvantaged Percent of Total	Nondisadvantaged Total N for Item	Nondisadvantaged Percent of Total	X^2
		54		79		
A	Great deal		48.15%		34.18%	2.504
	A lot		18.52		22.78	
	Some		18.52		31.65	
	A little		7.41		5.06	
	Not much		7.41		6.33	
		57		78		
B	Great deal		40.35%		15.38%	8.982*
	A lot		28.07		26.92	
	Some		21.05		41.03	
	A little		8.77		5.13	
	Not much		1.75		11.54	
		69		56		
C	Great deal		30.43%		35.71%	1.15
	A lot		18.84		23.21	
	Some		42.03		33.93	
	A little		2.90		3.57	
	Not much		5.80		3.57	
		78		64		
D	Great deal		44.87%		28.12%	6.939*
	A lot		26.92		21.88	
	Some		21.80		39.06	
	A little		3.85		4.69	
	Not much		2.56		6.26	

* Significant at .05 level

APPENDIX S

COMPARISON BY COMMUNITY OF DISADVANTAGED AND NONDISADVANTAGED SEVENTH GRADE FEMALE STUDENTS REGARDING AMOUNT OF CONSIDERATION GIVEN TO SCHOOL PLANS

		Seventh Grade Female				
		Disadvantaged		Nondisadvantaged		
Community	Amount of Thought	Total N for Item	Percent of Total	Total N for Item	Percent of Total	X^2
		87		71		
A	Great deal		56.32%		25.35%	14.998**
	A lot		18.39		30.98	
	Some		14.94		36.62	
	A little		4.60		2.82	
	Not much		5.75		4.23	
		59		94		
B	Great deal		50.85%		21.28%	17.741**
	A lot		28.81		23.40	
	Some		16.95		44.68	
	A little		0.00		7.45	
	Not much		3.39		3.19	
		88		71		
C	Great deal		52.27%		33.80%	5.706
	A lot		23.86		26.76	
	Some		13.64		36.62	
	A little		5.68		1.41	
	Not much		4.55		1.41	
		69		87		
D	Great deal		39.13%		27.59%	2.051
	A lot		26.09		40.23	
	Some		21.74		26.44	
	A little		7.25		2.30	
	Not much		5.79		3.45	

** Significant at .001 level

APPENDIX S

COMPARISON BY COMMUNITY OF DISADVANTAGED AND NONDISADVANTAGED NINTH GRADE MALE STUDENTS REGARDING AMOUNT OF CONSIDERATION GIVEN TO SCHOOL PLANS

		Ninth Grade Male				
		Disadvantaged		Nondisadvantaged		
Community	Amount of Thought	Total N for Item	Percent of Total	Total N for Item	Percent of Total	X^2
		65		63		
A	Great deal		49.23%		46.03%	2.656
	A lot		16.92		34.92	
	Some		27.69		17.46	
	A little		1.54		1.58	
	Not much		4.62		0.00	
		64		70		
B	Great deal		46.88%		28.57%	4.480
	A lot		25.00		27.14	
	Some		15.63		32.86	
	A little		7.81		8.57	
	Not much		4.69		2.86	
		53		77		
C	Great deal		43.40%		44.16%	3.865
	A lot		16.98		33.77	
	Some		32.08		18.18	
	A little		5.66		0.00	
	Not much		1.89		3.90	
		71		67		
D	Great deal		38.03%		34.33%	1.096
	A lot		36.62		29.85	
	Some		18.31		26.87	
	A little		4.23		1.49	
	Not much		2.82		7.46	

APPENDIX S

COMPARISON BY COMMUNITY OF DISADVANTAGED AND NONDISADVANTAGED NINTH GRADE FEMALE STUDENTS REGARDING AMOUNT OF CONSIDERATION GIVEN TO SCHOOL PLANS

		Ninth Grade Female				
		Disadvantaged		Nondisadvantaged		
Community	Amount of Thought	Total N for Item	Percent of Total	Total N for Item	Percent of Total	X^2
		88		85		
A	Great deal		55.68%		45.88%	1.477
	A lot		29.55		38.82	
	Some		7.95		11.77	
	A little		4.55		1.18	
	Not much		2.27		2.35	
		74		104		
B	Great deal		59.46%		34.62%	10.674**
	A lot		17.57		36.54	
	Some		18.92		25.96	
	A little		1.35		2.88	
	Not much		2.70		0.00	
		50		60		
C	Great deal		52.00%		45.00%	.534
	A lot		26.00		26.67	
	Some		18.00		26.67	
	A little		0.00		0.00	
	Not much		4.00		1.67	
		80		78		
D	Great deal		42.50		28.21%	14.10**
	A lot		25.00		34.62	
	Some		25.00		28.21	
	A little		5.00		7.69	
	Not much		2.50		1.28	

** Significant at .01 level

APPENDIX T

COMPARISON BY COMMUNITY OF DISADVANTAGED AND NONDISADVANTAGED SEVENTH GRADE MALE STUDENTS REGARDING THE AMOUNT OF CONSIDERATION GIVEN TO FUTURE JOB

		Seventh Grade Male				
		Disadvantaged		Nondisadvantaged		
Community	Amount of Thought	Total N for Item	Percent of Total	Total N for Item	Percent of Total	X^2
		50		80		
A	Great deal		54.00%		48.75%	.339
	A lot		14.00		21.25	
	Some		20.00		21.25	
	A little		4.00		2.50	
	Not much		8.00		6.25	
		52		78		
B	Great deal		53.85%		24.36%	10.851**
	A lot		28.85		34.61	
	Some		9.62		28.21	
	A little		3.84		6.41	
	Not much		3.84		6.41	
		69		57		
C	Great deal		34.78%		33.33%	.065
	A lot		27.54		28.07	
	Some		23.19		26.32	
	A little		8.70		8.77	
	Not much		5.80		3.51	
		78		63		
D	Great deal		34.62%		39.68%	.185
	A lot		26.92		20.63	
	Some		25.64		25.40	
	A little		2.56		7.94	
	Not much		10.26		6.25	

** Significant at .01 level

APPENDIX T

COMPARISON BY COMMUNITY OF DISADVANTAGED AND NONDISADVANTAGED SEVENTH GRADE FEMALE STUDENTS REGARDING THE AMOUNT OF CONSIDERATION GIVEN TO FUTURE JOB

		Seventh Grade Female				
		Disadvantaged		Nondisadvantaged		
Community	Amount of Thought	Total N for Item	Percent of Total	Total N for Item	Percent of Total	X^2
		85		71		
A	Great deal		55.29%		32.39%	8.114*
	A lot		15.29		23.95	
	Some		17.65		32.39	
	A little		7.06		5.63	
	Not much		4.71		5.63	
		53		94		
B	Great deal		66.04%		24.47%	23.425**
	A lot		22.64		28.72	
	Some		7.55		37.23	
	A little		1.89		5.32	
	Not much		1.89		4.26	
		88		71		
C	Great deal		51.14%		45.07%	.547
	A lot		26.14		26.76	
	Some		12.50		23.94	
	A little		5.68		2.82	
	Not much		4.54		1.41	
		69		87		
D	Great deal		27.54%		27.59%	2.658
	A lot		26.09		34.48	
	Some		21.74		26.44	
	A little		13.04		4.60	
	Not much		11.59		6.90	

* Significant at .05 level
** Significant at .001 level

APPENDIX T

COMPARISON BY COMMUNITY OF DISADVANTAGED AND NONDISADVANTAGED NINTH GRADE MALE STUDENTS REGARDING THE AMOUNT OF CONSIDERATION GIVEN TO FUTURE JOB

		Ninth Grade Male				
		Disadvantaged		Nondisadvantaged		
Community	Amount of Thought	Total N for Item	Percent of Total	Total N for Item	Percent of Total	x^2
		61		61		
A	Great deal		47.54%		49.18%	.317
	A lot		29.5i		27.87	
	Some		16.39		21.31	
	A little		4.92		1.64	
	Not much		1.64		0.00	
		62		69		
B	Great deal		51.61%		27.54%	7.572*
	A lot		17.74		24.64	
	Some		20.97		30.43	
	A little		3.23		11.59	
	Not much		6.45		5.80	
		52		76		
C	Great deal		44.23%		51.32%	10.493**
	A lot		13.46		35.53	
	Some		30.77		10.53	
	A little		7.69		1.31	
	Not much		3.85		1.31	
		72		68		
D	Great deal		48.61%		42.65%	4.94
	A lot		31.94		20.59	
	Some		13.89		27.94	
	A little		2.78		2.94	
	Not much		2.88		5.88	

* Significant at .05 level
** Significant at .01 level

APPENDIX T

COMPARISON BY COMMUNITY OF DISADVANTAGED AND NONDISADVANTAGED NINTH GRADE FEMALE STUDENTS REGARDING THE AMOUNT OF CONSIDERATION GIVEN TO FUTURE JOB

		Ninth Grade Female				
		Disadvantaged		Nondisadvantaged		
Community	Amount of Thought	Total N for Item	Percent of Total	Total N for Item	Percent of Total	X^2
		89		83		
A	Great deal		53.93%		40.96%	3.202
	A lot		33.71		39.76	
	Some		7.87		14.46	
	A little		3.37		2.41	
	Not much		1.12		2.41	
		70		104		
B	Great deal		58.57%		32.69%	11.208**
	A lot		17.14		29.81	
	Some		21.43		28.85	
	A little		1.43		4.81	
	Not much		1.43		3.84	
		50		60		
C	Great deal		52.00%		43.33%	.819
	A lot		22.00		31.67	
	Some		22.00		20.00	
	A little		2.00		1.67	
	Not much		2.00		3.33	
		80		78		
D	Great deal		33.75%		28.21%	5.35
	A lot		31.25		38.46	
	Some		22.50		20.51	
	A little		10.00		8.97	
	Not much		2.50		3.85	

** Significant at .01 level

APPENDIX U

COMPARISON BY COMMUNITY OF DISADVANTAGED AND NONDISADVANTAGED SEVENTH GRADE MALE STUDENTS REGARDING AMOUNT OF CHOICE OF OCCUPATION THEY HAVE

		Seventh Grade Male				
		Disadvantaged		Nondisadvantaged		
Community	Amount of Choice	Total N for Item	Percent of Total	Total N for Item	Percent of Total	X^2
A	Great deal	79	27.2%	80	38.7%	.533
	A lot		22.9		27.5	
	Some		10.0		27.5	
	A little		5.7		5.0	
	Not much		1.4		1.2	
	No choice		1.4		0.0	
	No response		31.4		0.0	
B	Great deal	60	21.7%	78	30.8%	3.301
	A lot		18.3		35.9	
	Some		28.3		28.2	
	A little		8.3		3.8	
	Not much		3.3		1.3	
	No choice		0.0		0.0	
	No response		20.0		0.0	
C	Great deal	71	26.8	59	20.3	1.547
	A lot		31.0		27.1	
	Some		29.6		40.7	
	A little		2.8		5.1	
	Not much		2.8		3.4	
	No choice		2.8		0.0	
	No response		4.2		3.4	
D	Great deal	82	25.6	64	28.1	.145
	A lot		28.0		28.1	
	Some		30.5		32.8	
	A little		6.1		7.8	
	Not much		3.7		1.6	
	No choice		2.4		1.6	
	No response		3.7		0.0	

APPENDIX U

COMPARISON BY COMMUNITY OF DISADVANTAGED AND NONDISADVANTAGED SEVENTH GRADE FEMALE STUDENTS REGARDING AMOUNT OF CHOICE OF OCCUPATION THEY HAVE

		Seventh Grade Female				
		Disadvantaged		Nondisadvantaged		
Community	Amount of Choice	Total N for Item	Percent of Total	Total N for Item	Percent of Total	X^2
A	Great deal	91	30.8%	71	23.9%	1.252
	A lot		25.3		39.4	
	Some		29.7		32.4	
	A little		6.6		4.2	
	Not much		1.1		0.0	
	No choice		0.0		0.0	
	No response		6.6		0.0	
B	Great deal	62	37.1%	94	20.2%	7.286*
	A lot		14.5		25.5	
	Some		32.3		42.6	
	A little		1.6		10.6	
	Not much		0.0		1.1	
	No choice		0.0		0.0	
	No response		14.5		0.0	
C	Great deal	89	28.1%	71	21.1%	1.737
	A lot		27.0		45.1%	
	Some		32.6		32.4	
	A little		9.0		1.4	
	Not much		2.2		0.0	
	No choice		0.0		0.0	
	No response		1.1		0.0	
D	Great deal	69	20.3%	87	23.0%	8.098*
	A lot		18.8		39.1	
	Some		46.4		32.2	
	A little		11.6		4.6	
	Not much		1.4		1.1	
	No choice		1.4		0.0	
	No response		0.0		0.0	

* Significant at .05 level

APPENDIX U

COMPARISON BY COMMUNITY OF DISADVANTAGED AND NONDISADVANTAGED NINTH GRADE MALE STUDENTS REGARDING AMOUNT OF CHOICE OF OCCUPATION THEY HAVE

		Ninth Grade Male				
		Disadvantaged		Nondisadvantaged		
Community	Amount of Choice	Total N for Item	Percent of Total	Total N for Item	Percent of Total	X^2
A	Great deal	70	34.3%	77	24.7%	1.520
	A lot		24.3		31.2	
	Some		17.1		19.5	
	A little		4.3		6.5	
	Not much		1.4		0.0	
	No choice		1.4		0.0	
	No response		17.1		18.2	
B	Great deal	65	30.8	70	18.6	2.045
	A lot		35.4		38.6	
	Some		20.0		30.0	
	A little		4.6		7.1	
	Not much		7.7		2.9	
	No choice		0.0		1.4	
	No response		1.5		1.4	
C	Great deal	53	20.8	77	29.9	4.951
	A lot		30.2		40.3	
	Some		39.6		26.0	
	A little		5.7		1.3	
	Not much		1.9		0.0	
	No choice		0.0		0.0	
	No response		1.9		2.6	
D	Great deal	72	12.5	65	23.1	1.408
	A lot		43.1		35.4	
	Some		27.8		36.9	
	A little		9.7		1.5	
	Not much		4.2		3.1	
	No choice		0.0		0.0	

APPENDIX U

COMPARISON BY COMMUNITY OF DISADVANTAGED AND NONDISADVANTAGED NINTH GRADE FEMALE STUDENTS REGARDING AMOUNT OF CHOICE OF OCCUPATION THEY HAVE

		Ninth Grade Female				
		Disadvantaged		Nondisadvantaged		
Community	Amount of Choice	Total N for Item	Percent of Total	Total N for Item	Percent of Total	X^2
A	Great deal	90	33.3%	85	31.8%	3.861
	A lot		30.0		41.2	
	Some		24.4		18.8	
	A little		7.8		0.0	
	Not much		4.4		1.2	
	No choice		0.0		0.0	
	No response		0.0		7.1	
B	Great deal	74	20.3%	104	27.9%	5.662
	A lot		25.7		35.6	
	Some		39.2		28.8	
	A little		5.4		5.8	
	Not much		9.5		1.0	
	No choice		0.0		0.0	
	No response		0.0		1.0	
C	Great deal	51	13.7%	60	23.3%	.954
	A lot		31.4		28.3	
	Some		41.2		38.3	
	A little		7.8		6.7	
	Not much		2.0		1.7	
	No choice		0.0		0.0	
	No response		3.9		1.7	
D	Great deal	80	13.7%	81	12.3%	5.961
	A lot		27.5		48.1	
	Some		48.7		27.2	
	A little		7.5		8.6	
	Not much		2.5		3.7	
	No choice		0.0		0.0	
	No response		0.0		0.0	

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