ED 029 747

RC 003 462

By-Allen, Donald E.; Robinson, Oliver W.

Some Factors Affecting Academic Performance of Public Assistance Students.

Langston Univ., Okla.

Spons Agency-Department of Agriculture. Washington, D.C.

Note-60p.

EDRS Price MF-\$0.50 HC-\$3.10

Descriptors-Academic Aspiration. *Academic Performance. Disadvantaged Youth. *Family Environment. Family Income. *High School Students. Low Income Groups. Mothers. Occupational Aspiration. Parental Aspiration.

Parent Child Relationship. *Rural Youth. *Welfare Recipients

A study was conducted in Logan County, Oklahoma, among rural disadvantaged high school students whose families' total income was \$4.000 annually or below. The objectives of the study were: (1) to determine whether the source of family income, public or non-public assistance, had an effect upon academic performance of students from the same socioeconomic bracket; (2) to determine the relationship between the parent's educational aspirations for the child and the child's own aspirations; and (3) to determine the effects of family role evaluation within the family on academic performance. Separate questionnaires were filled out by 145 students and their mothers. Sixty of the students were from families receiving public assistance and 85 of the students were from families who were not receiving any aid, but who income was below \$4,000. The study revealed: (1) public assistance students received lower grades than non-public assistance students: (2) parents had lower vocational aspirations for their children than the children themselves: and (3) academic performance was definitely affected, both by the degree of shared activity with parents, and by the amount of help which parents gave to their children. (RH)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE OFFICE OF EDUCATION

Research Monograph

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

Some Factors Affecting Academic Performance Of Public Assistance Students

Donald E. Allen and Oliver W. Robinson





THE OFFICE OF RESEARCH AND DEVELOPMENT LANGSTON UNIVERSITY
1969



PREFACE

The preparation and publication of this study was made possible through Grant Number 716-15-35 of the State Cooperative Research Project, sponsored by the United States Department of Agriculture, to Langston University, Langston, Oklahoma. The materials reported herein are taken from data developed in the Logan County Youth Study, by a research team of which both authors are members. Other members are Richmond Kinnard, Director, Zella Patterson, Glenda Warren, Delores Reed, and Rebecca Baughman, all of the faculty of Langston University. The combined efforts of these colleagues has made this study possible. Larzette G. Hale, Director of Research and Development at Langston University is due our special thanks for her assistance and support in administering the research, and in counseling on the make-up of the research effort. We also wish to recognize the support and assistance of John Egermeier of the Research Foundation of Oklahoma State University and Gene Acuff, Head of the Department of Sociology, who have provided invaluable cooperation in making available some of the facilities of Oklahoma State University and John Williams, colleague, who helped to organize the research team. We also extend thanks to the superintendents, principals and faculties of the high schools of Guthrie, Coyle, Crescent, Orlando, Marshall, and Mulliall, all of Logan County, Oklahoma for their cooperation and assistance in administering the research instruments in the schools. Working with these dedicated professionals has constituted a major advantage in undertaking the study. We are also indebted to L.E. Rader, Director of Welfare of the State of Oklahoma and the Welfare Office of Logan County at Guthrie, for his generous cooperation in providing the necessary data on the existing welfare situation in Logan County.

In a joint publication of this kind it is neither practical nor possible to sort out the separate contributions of the authors. We therefore assume joint responsibility for any errors or oversights which may come to light. Our main concern is that we may contribute in some small way to the continuing effort to improve understanding of factors related to the development and adjustment of high school and post-high-school youth, and specifically, in the present instance, of youth from public assistance families. At this writing, there seems some possibility that we are on the last frontiers of poverty in the United States. Langston University has expressed particular interest in providing a means for the transition of rural youth, including those from deprived families, to the cultural and technical skill levels which will prepare them for full participation in the modern age.

The main outlines of this document were also incorporated by Oliver Robinson in a doctoral dissertation entitled "Selected Socioeconomic Factors Affecting Academic Performance of Public and Nonpublic Assistance Students in Logan County", which was developed from the same body of data. The thesis was presented to the Graduate College of Oklahoma State University through the Department of Agricultural Education. Members of the thesis committee, Robert R. Price, Head of the Department of Agricultural Education, and William L. Hull, Adviser, have concurred in the publication of the present monograph based on these materials.

Donald Emerson Allen
Oklahoma State University

Oliver Wendell Robinson Tuskegee Institute

January 1969 Langston, Oklahoma 73050



TABLE OF CONTENTS

PREFACE
LIST OF TABLES ii
Section Page
1. INTRODUCTION 1.1 Significance of Problem 1.2 Objectives, Hypotheses, and Definitions
2. RELATED RESEARCH ON FAMILY INFLUENCE 2.1 Parental Attitudes to Education 2.2 Educational Aspirations of Parent and Child 2.3 Student Aspirations and Academic Performance 2.4 Family Role Evaluation and Effects on Academic Performance 2.5 Level of Family Income as it Effects Academic Performance 2.6 Summary
3. METHODOLOGICAL FACTORS 3.1 Procedures 3.2 Selection of High Schools 3.3 State and County Department of Institutions, Social and Rehabilitative Services 11 3.4 Instrumentation 3.5 Administering the Instrument 3.6 Description of the Population 3.7 Design of the Study 3.8 Data Analysis and Statistical Treatment
4. EFFECTS OF SOCIAL AND ECONOMIC FACTORS ON PERFORMANCE AND ASPIRATIONS 15 4.1 Academic Performance of Public and Nonpublic Assistance Students 15 4.2 Role Evaluation of Family Relationships 18 4.3 Analysis of Parent's and Child's Occupational Aspirations 24 4.4 Mothers' and Childrens' Attitudes Toward Education 27
5. REVIEW AND RECOMMENDATIONS 32 5.1 Research Procedures 32 5.2 Findings 33 5.3 Recommendations 34
REFERENCES
APPENDIX A
APPENDIX B



LIST OF TABLES

Lable	Page Page
I.	Percentage Comparison of Perceived and Recorded Levels of Academic Performance
II.	Perceived Level of Academic Performance for Students of Public and Nonpublic Assistance Families 16
III.	Recorded Level of Academic Performance for Students of Public and Nonpublic Assistance Families 17
IV.	Levels of Academic Performance for Public Assistance and Nonpublic Assistance Students
V.	Self-Concept of Academic Abilities and Confidence of Success in Post-High School Plans
VI.	Students' Concept of Academic Abilities, Confidence, and Conformity to Expectations
VII.	Role Aspects of Family Relationships
VIII.	Family Roles by Grade, Aspiration and Academic Performance
IX.	Correlation of Family Role Factors and Family Relationships
X.	Health of the Family by Race and Source of Income
XI.	Health Aspects of the Family by Grade, Aspiration, and Performance
XII.	Correlative Analysis of the Health Aspects of the Family
XIII.	Analysis of Parent's and Child's Aspirations
XIV.	Job Aspiration by Grade, Education Level Aspired, and Level of Academic Performance
XV.	Relationships Between Jobs Preferred, Jobs Expected, and Attitudes on Work
XVI.	Comparison of Mother's Job Aspiration for Child by North-Hatt Rating
XVII.	Attitudes Toward Courses Enrolled and Coilege Preparation
KVIII.	Student Responses on Level of Education Needed for the Aspired Job
XIX.	Mother's Perceived Levels of Education Students Need for Aspired Jobs
XX.	Students' and Mothers' Attitudes on Level of Education Students' Spouse Should Have



SECTION 1. INTRODUCTION

1.1 Significance of the Problem of Education For Low-Income Families

There is a need to determine the effects of such socioeconomic factors as parental attitudes toward education, family role evaluation within the family, students' and parents' educational aspirations, and level of family source of family income on the academic performance of students whose families fall among lower income groups in Logan County, Oklahoma. Approximately 40 percent of high school students in Logan County are members of low-income families. It was the students and parents of these families on which this study was focused.

Many earlier studies have predicted that the proportion of students who drop out of school, especially those from the low-income families, will continue to increase. If the drop-out rate is to be reduced, the public school personnel will need a clearer understanding of the effects of parental attitudes toward education, effects of the individuals' roles within the family, students' and parents' educational aspirations and level of family income on the academic performance of students from the under-four-thousand-dollar level of income. Such factors as parent's attitudes toward their children's academic performance and their educational and vocational aspirations are important and require clear understanding by educators. Educators have long recognized the influences of the relationships within the family on the academic performance of high school students; however, these influences generally have not been perceived at the low-income level. These influences relating to academic performance of students from low-income families, are often reflected in early drop-out or in the failure to prepare any post-high-school plans.

Industrialization in the United States, has had the effect of lengthening and expanding the formal educational requirements for all youth. This broadened educational concept affects the entire adolescent population. The fact that more formal education is required of each high school student to secure a marketable skill places relatively greater pressure on students of low-income families to stay in high school and to perform at a higher academic level than that which had been expected of their parents.

As educators develop new and varied educational programs in the public school systems of Logan County, it becomes imperative that more should be known about the social and economic influences on academic performance of low-income students. The students of low-income families are becoming a major concern of educators, and much of the problem seems to arise from a wide range of socioeconomic factors. The intensity of the social problems that students of low-income families encounter is perceived as having adverse effects on their academic performance as the standards at the secondary and post-secondary levels are raised.

The broadening concepts in curricula offerings are evident in the high school programs in Logan County. The 1963 Vocational Education Act provides the means for vocational programs at the secondary level to include all students who can profit from vocational training in its programs. This provides an educational program for those students who do not desire to pursue a college preparatory curriculum and an opportunity for students to develop a marketable skill at the secondary level as well as the post-secondary level. As larger numbers of low-income students seek vocational training at the secondary and post-secondary levels, more will have to be known about the social and economic factors which influence the academic performance of these students. Such knowledge is of immediate value to school administrators, faculty, and counselors who are effective in guiding students in improving academic performance.

A number of studies have shown the drop-out rate at the high school level to be associated with poor academic performance. It is also shown that the drop-out rate is highest in areas with a high percentage of low-income families (Dept. of Agriculture, 1966, 20). "The median school year completed by Logan County residents in 1960 was 9.0 years; some 1.4 years below the average for the State of Oklahoma. Furthermore, both men and women in Logan County had lower levels of school attainment than for Oklahoma in general" (Logan County, 1967, 14). If grade attainment by residents in the county is to be increased, the academic performance of students must be improved. As school systems in Logan County gain a clearer insight of socioeconomic factors effecting the academic performances of these students, more effective programs can be developed to meet the needs of low-income students. Most secondary school programs are organized to meet the needs of the upper income students (Sexton, 1961, 199). This practice in the public school systems has tended to support the assumption that deprived students do not have either the desire or the ability to learn. It is an accepted fact that many professionals feel the "culturally deprived" child is not interested in education (Riessman, 1962, 2-8). Such professional attitudes would logically tend to degrade the quality of teaching, counseling and training services as well as the incentives proffered to



low-income students.

There is a concern at the local, state, and federal levels of government that it is possible that children of public assistance families are effectively prohibited from taking full advantage of educational opportunities. The underlying concept is that there are factors associated with public assistance which cause several generations of persons to expect and accept public assistance. Schools are continuously seeking ways and means of better educating students of this socioeconomic level who enter the labor market directly from the secondary schools. Basic to accomplishing this task is understanding socioeconomic factors that effect the academic performance of large numbers of these students.

The educational demands made of the students at the lower socioeconomic level require parents of these students to take a more active interest in their school affairs. In an interview, Durkin found over 50 per cent of the white and 70 per cent of Negro parents said education was the thing they missed in life and wanted their children to have. If Durkin's conclusions are correct, the public schools will be called upon to provide in more adequate measure for the educational needs of the disadvantaged. Because large numbers of students at this socioeconomic level are not willing to accept deferred gratification, vocational education probably will be the educational program which will appeal to a larger proportion of these students. It will be the responsibility of educational personnel to help the students of this socioeconomic level in understanding their educational needs.

It is the cumulative interaction of students, staff, content, methods, resources, school and community milieu, and family relationships which directly affect the development of the individual's potential. As educators comprehend these interactions and deepen their insights and understanding of the impacts on learning, they build a more meaningful construct of the teacher learning process. As educators understand that there are individual abilities ignored or slighted by school programs, that groups of youngsters are confronted with learning tasks inappropriate for them, and that cultural and subcultural forces significantly influence pupil achievements, they begin to see the rough outline of a framework for thinking about a multi-dimensional approach to nurturing individual potentials. (Passow, 1964, 1-2)

If the county school systems are to aid the disadvantaged students in obtaining a high degree of upward social mobility, a clear perspective of parents' aspirations for the students must be developed. The educators' perception of parents' educational aspirations for the student and their attitudes toward education are important in attempting to improve the academic performance of secondary students. Moreover, students' educational aspirations as well as the evaluation of roles within the family will provide a basis for developing better methods and techniques of helping these students improve their academic performance.

1.2 Objectives, Hypotheses, and Definitions

The purpose of this study was to investigate the effects which the source of family income for low-income families has on the disadvantaged students' level of academic performance where the source of income is public assistance or non-public assistance. The study investigates family evaluation of role relationships and assesses the effects on aspiration and level of academic performance of low-income students. We also seek to determine the degree of similarity between students' aspiration for themselves and the mother's aspiration for the student. Finally it is proposed to investigate the similarities and differences of the students' and mothers' attitudes toward education.

Specifically, the study is designed to achieve the following objectives:

- 1. To determine whether the source of family income, public or non-public assistance, has an effect upon the academic performance of students from the same socioeconomic level.
- 2. To determine the relationship between the parent's educational aspirations for the child and the child's educational aspiration for himself.
- 3. To determine the effects of family role evaluation within the family on the academic performance of students of the same socioeconomic level.

The following hypotheses are tested:

- 1. Students from public assistance and nonpublic assistance low-income families will differ in perception of their level of academic performance, and nonpublic assistance students will have a higher recorded level of academic performance.
- 2. Evaluation of family roles within the family will influence the source of family income, aspired levels of education, and levels of academic performance of students of public assistance and nonpublic assistance families.
- 3. There is a positive relationship between parent and child attitudes toward education and their educational

aspirations for the child.

The terminology used here is chosen to reflect the thinking of professionals who have studied the problems of low-income people in the United States. For our operational applications the following pasic terms are defined:

Socioeconomically deprived describes children of low-income parents who live in our affluent society but do not share its benefits (Kemp, 1966, 8).

Low-income refers to a level of income that does not exceed four thousand dollars per year.

Academic performance is the cumulative grade average for the last two semesters prior to January 28 of the 1968-69 school year.

Social strata refers to a socioeconomic level in which families are classified due to level of income. For the purpose of this study the income level is four thousand dollars.

<u>Family</u> implies to two or more persons living in the same household who are related to each other by blood, adoption, or a foster arrangement.

<u>Family role evaluation</u> refers to the family members' ratings of activities and relationships within the family which contribute to close adherence as a family unit.

Parent includes the mother, stepmother, or other adult female who performs the function or role of a mother.



SECTION 2. RELATED RESEARCH ON FAMILY INFLUENCE ON ACADEMIC PERFORMANCE

2.1 Parental Attitudes Toward Education

The attitudes of parents toward education, their aspirations for the child, and the evaluation of family relationships by parent and child are reflected in the level of the academic performance of the child. Some knowledge regarding academic performance has been obtained through studies of levels of aspirations, achievements and occupational choices. Buck studied the cause of drop-out closely related to academic performance and concluded a wide range of socioeconomic factors caused the drop-out. Irelan states that children of low-income families are frequently retarded to a greater degree in subject matter comprehension and grade level than their better-off counterparts (1966, 31).

It is recognized by many educators that the level of academic performance is the best single indicator of school success or failure. The parents play a major role in stimulating and influencing the academic performance of students. If students of low-income families are to perform at a high academic level, most of them would benefit from parental encouragement. To perform the parental responsibility of encouraging their children in the student role, the parents must have a positive attitude toward education. The student's attitudes are often a mirroring of the parent's attitudes toward education. Larkin found that children are in many ways the products of their parent's cultural backgrounds (1951).

There is also substantial evidence that parents influence children's occupational decisions through their attitudes toward them and their identification with them. It was shown by Brunkan that attitudinal stance of parents was most important in influencing the child (1965). It is believed that students of many low-income families fail to receive parental encouragement to strive for high academic performance. Many of these students do not encounter parents with high scholastic aptitudes and intelligence. Kirkendall and Ard cited studies which substantiated the concept that many academic problems of youths seem to be related to their attitudes toward and the quality of their home relationships. The studies also revealed that childhood socioeconomic levels are related to the scholastic aptitudes and intelligence performances of adult subjects (1952).

Whether parental attitudes toward education stimulate high academic performance of the students depends on the students' perception of their parents' attitudes. When adolescents were asked if they perceived parents as being significant in influencing attitudes and beliefs, and when trying to make up their minds about something important to whom do they turn for advice, nine of every ten respondents named one or both parents (Rosen, 1955). It is recognized that the level of academic performance is one of the most crucial aspects of the students' school involvement. Many students who do not set high goals of academic performance could do so if they were properly encouraged. Parents, as well as teachers, can influence disadvantaged students' academic performance by helping them see themselves as individuals and to see that they have the ability to make worthwhile contributions to their community and the world (Mitchum and Mitchum, 1958). The child's dependence gives the parent an advantage in encouraging high academic performance.

The students' empathetic understanding of the parents' attitudes toward education serves as a stimuli or suppressive technique to effecting academic performance. A study of parental relationships regarding self esteem and intellectual achievement was conducted by Hallenbeck. Grade points were used as a measure of intellectual achievement. The study showed empathetic understanding among males to be significantly related to intellectual achievement. The strongest relationships existed between father-son, and the weakest relationship was between the father-daughter (1965). The implication of this result was that the father influences the student adjustment and academic performance.

Many students of public assistance families do not have fathers as a part of the family unit; therefore, the effects of the father on adjustment and academic performance of these students are absent. In these families parental encouragement of academic performance is entirely dependent upon the mother's attitudes. It has been found that the level of the mother's education is directly related to the child's grade level of achievement in school. For each increase in the level of education of the homemaker, receiving public assistance, there was a corresponding decrease in proportion of children leaving school to provide family support. Also, the higher the educational level of the mother, the lower the proportion of children showing retardation (Burgess and Price, 1963, 111).

Educators recognized some desirability of parents assuming the leading role of encouraging high academic performance of their children. There appears to be a positive relationship between parents' educational values and



the students' level of academic performance. It has also been shown that parents of underachievers consistently have less education, and their values tend to be neutral or negative with respect to education, while the parents of achievers tend to value education positively. The relationship which exists between the underachiever and his parents tends to be a more distant one, psychologically speaking, than the relationship which exists between the achiever and his parents. Also, the parents of the achievers showed a greater tendency to push their children toward achievement not only in school but in other areas as well (Share and Lieman, 1965).

Attitudes of parents toward education produce many characteristics in their children that affect their level of academic performance. Parents' attitudes are believed to affect independency and academic maturity of high school students. The possibility that parents' attitudes and child-rearing practices might conceivably be related to the academic achievement of their children has been suggested by Shaw (1964). He concluded from his study entitled "Parent Attitudes Toward Independent Training and Academic Achievement of Their Children," that parents of achievers were more specific, wanted their children to learn to make their own decisions, and expected them to be more adult-like in behavior. Shaw found that parents of the underachievers were more concerned with their children protecting their personal rights.

The trend of predicting academic survival of low-income students has been toward assessing the effects of non-intellectual factors. These are evaluated in relationship to the student's level of academic performance which is interpreted in terms of grades earned. For example, Carter (1959) found that when academic performance was determined, it was useful in predicting the students' continuation in school. Various authorities who have worked with deprived children agree that many of these students' low level of academic performance was due to factors other than inate mental ability. Finger and Schlesser (1965) concluded that many students perform below their potential level of academic abilities and showed little concern about their poor academic performance. They suggested there are some values or attitudes which prevented the striving for school success, and school achievement must be related to a complex of cultural commitments stemming from self and parents' expectations for school and career.

2.2 Educational Aspirations of Parent and Child

Parental Aspirations for the Student:

Sociologists Kevlesky and Bealer (1966) agree that an individual may be strongly or weakly motivated toward achievement or a particular goal regardless of the prestige rank or social value or the goal. Therefore, goals toward which individuals are oriented vary in kind and level, while Seigel (1967) sees the level of aspiration as a function of the seeking of success, avoiding of failure, and the cognitive factor of a probability judgement. It would seem that several of these factors relate to the parents' educational aspirations regarding their children.

Students from low-income families need to encounter personal situations which will encourage the development of high educational and occupational aspirations. The more personal and proximate the source of information the student uses to influence his aspirations, the more important the information is to the student. Ozack found that personal sources of information are more important than others in channeling a person's occupational preference (1960). The level of educational aspiration which parents hold for their children appears to be reflected in the students' educational plans beyond high school. Brodua's study (1960) also showed parentally stressed aspirations to be positively related to plans to attend college.

Parents can effectively stimulate high levels of educational aspiration among their children; however, the researchers believe the degree to which the levels of aspirational motivation possessed a higher degree of ambition than those receiving low aspirational motivation. Bell shows that a relationship exists between the educational level of parents and the selected college and post college plans of Negro students (1963).

Socioeconomic Status of Parents:

The educational aspiration level of students may be affected in several ways by their parents. It has been shown that socioeconomic status is positively related to educational aspirations, and students of the lower social status are less likely to aspire for college than are the students of higher social status (Sewell, 1964). If low-income students are to have high educational aspirations, they should be exposed to educational frames of reference early in childhood. Turner indicated that during adolescence the individual makes choices and formulates goals which orient him toward his approaching adult status. Ideally, one evaluates the cultural goals and formulates personal goals to project his future status in numerous social structures (Jaffe, 1967).

A number of studies of "social class position of parents and their children's actions," revealed a positive relationship between an adolescent's family class position and his social behavior in the community. Holloway and



Berreman (1959) studied the phenomenon of race and social class by testing the hypotheses that: Lower class Negroes are faced with obstacles of both class and race, would be expected to plan below their aspirations, and that all students share the general cultural value of high achievement but are faced with obstacles imposed by class position. The results of the study suggested that educational aspirations are the same regardless of class; however, educational plans are affected by class and Negro plans do not fall below those of white students on the same class level with regards to education and occupation. The idea that low-income families are usually engaged in occupations or work situations that have little or no status and that their children's level of academic motivation is greatly influenced by the educational and occupational values of the parents is supported by Kahl (1953). The Kahl study showed educational climate of the home, families desires to sacrifice for the education of the child, and the degree of parental stress on education to have a positive effect upon aspirations.

The Burchinal study, "Differences in Educational and Occupational Aspirations of Farm, Small Town, and City Boys," (1961) investigated the relationship between social and community orientation. Burchinal concluded that there is a rank order in educational aspiration levels of urban, small town, non-farm oriented, farm, and farm-oriented boys when the small town and rural areas are low in industrialization. Also, parental involvement in educational decision making—was lowest among farm students. He found that mothers were more involved than fathers in the educational decisions made in all the groups.

Mobility Orientation of Parents:

The concept that parents who have downward social mobility orientations frequently encourage upward social mobility is supported by Lipset and Bendix. Their findings showed 64 per cent of the sons of downward mobile fathers planned to attend college, while only 45 per cent of the sons of non-mobile fathers planned to attend college. However, the study showed downward mobile mothers had the greatest significant relationship with regards to the son's mobility potential (1962, 238). Ellis and Land (1963) studied the social mechanisms that lead lower-class youth to use college at a mobility channel. They concluded that upward mobility is linked to a distinctive pattern of maternal authority within the nuclear family and that it also depends on support from external structures, such as high school teacher and peer groups.

2.3 Student Aspirations and Academic Performance

Teachers in the public schools have long been concerned with aspirations and academic performance of students. These areas of interest have been assessed and should continue to be assessed, especially at the lower socioeconomic level, to aid in developing more successful teaching techniques for the socioeconomically disadvantaged. If the school personnel are to meet their developmental responsibility of the socioeconomically deprived students' educational aspirations, academic performance should be explored on the lower socioeconomic level. Kemp perceives the school as having a prime responsibility for developing the disadvantaged student both personally and academically (1966).

Self-Concept:

The socioeconomically deprived students do not succeed or fail in an academic or social vacuum. They perform at a given academic level because of the interacting variables which make up their interpersonal environment. Self-concept, as used in most research, is the product of the personality structure of the individual which determines the degree of adequacy one sees in himself. The researcher perceives self-concept to be a vital aspect of academic performance. Fink concluded that to a significant degree, an adequate self-concept is related to high academic achievement and an inadequate self-concept is consistently related to low academic achievement (1965).

Tuel and Wursten (1965) describe the relationship between academic performance and self-concept as being reciprocal. In many instances a negative self-concept appears to impede academic achievement, in other instances, a negative self-concept is perceived as being the product of poor achievement. Probably the two are mutually reinforcing. Berger studied this phenomenon in college students and reports that:

"Students with a high score on 'willingness to accept limitations' tend to get better grades. Underachievers, by contrast, were able to accept only the good in themselves and evidenced idealized self-images which did not correspond to reality. They established extremely high standards for themselves, wholeheartedro- of effort, and expressed the belief that they should achieve at a high level with little effort. They were unwiking to risk being wrong, being disappointed, or doing poorly." (1961)

There is support for the belief that a positive relationship exists between self-concepts, or self-perception and aspirations. Anderson (1965) concluded that self-perception has important effects upon the level of aspirations and



that a young person's view of his educational potentials are influenced by his perception of the expectations and evaluations that others have of him. Finally, Anderson finds that there is a strong relationship between one's self-perception of his academic abilities and academic achievement. It is frequently asked whether the self-concept of the disadvantaged child can be changed in a positive direction by education. Campbell, Yorrow, and Yorrow concluded that education can change self-concept; however, the permanence of change depends in large part on the support given for such change at home (See Kvaraceus, 1965, 25).

Peer Group Influence:

The effects of peer group influence are highly evident by the students reactions to the level of the aspiration situation in a similar way, whereas, unsuccessful children lacking in self-confidence may adopt one of a number of different behavior techniques in this situation. Furthermore, success, when experimentally induced, brings the reactions of all subjects in regard to level of aspiration into a more homogeneous distribution than do the neutral conditions of environmental situations (Sears, 1940).

Simpson studied the effects of peer group influence and concluded that the social status of close peers had an influence upon the level of occupational aspirations (1962). And Haller and Butterworth (1960) in a study of 17-year old boys revealed that peer interactions had an effect upon the level of educational and occupational aspirations.

Peers serve as an important socialization process for high school students. However, low-income students' peers are less likely than upper income students' peers to encourage high academic performance. Davin stated that socialization is fundamentally rooted in social class in two ways: first through the family and second through the school clique of peers with which the child will ordinarily associate. The social cliques may serve as alternate role-models to the family. These are generally limited by one's class antecedent (1940). Whether students achieve the adult-approved objectives of socialization depends upon the peer group relationships. Grinder investigated the hypothesis that great emphasis on youth-centered activities might well interfere with or negate such adult approved activities as academic achievement. The major finding of Grinder's study were that the academic performance was negatively associated with peer relation interest and that clique membership was associated with status seeking (1966).

Intelligence:

Several research studies support the idea that the student's educational aspirations are affected by intelligence. Curry concluded that the level of academic achievement is controlled to a degree by the intelligence of the individual. He further stated that "as the individual's ability decreases from high to low, the effects of social and economic conditions on scholastic achievement increases greatly" (1962). This situation was basically operative with language, which is recognized as a significant factor in the learning process of low-income students.

The concept that youth of low intelligence are concentrated in the lower social classes, and this effects the low level of aspirations associated with this group is supported by Sewell, Haller and Straus (1957). Miller and Newman studied social and economic conditions of Negroes in the United States and found the average Negro youngster in the final year of high school is performing at a ninth grade level as compared to white students. The gap in achievement level between Negro and white students widens between the sixth and twelfth grades (Malik, 1966).

Intelligence is a vital factor in effecting aspirations for training at the college level. A student's aspiration for college training and his level of intelligence tend to show a positive relationship. Sewell studied the relationship between educational aspiration and college plans. He found students who scored in the top third in intelligence were nearly twice as likely to plan to attend college as those students scoring in the middle third, and more than four times as likely as those scoring in the lowest third (1964).

2.4 Family Role Evaluation and Their Effects On Academic Performance

The family role evaluations within the family have been investigated and related to academic performance and abilities of high school students. Malik investigated family relationships and educational patterns of Canadian children. The study of patterns of education among grown-up children in families where the father had completed eight years or less grades of education showed a higher grade level attainment. However, children of public assistance families had a higher drop-out rate in relation to the level of the father's education (1966).

Parents of low-income families are beginning to realize that education is an important part of the socialization process. The effectiveness of the socialization process on the low-income students depends upon the perception of relationships within the family and their effects on the students' academic performance. Malik reflected on the importance of family relationship function as follows:

"By defining values, goals and social expectations for their children, in the course of socialization,



parents can communicate the importance they attach to education, as an activity valuable in itself or as a valued means to occupational success. In addition parents may communicate the more general values which aid scholastic achievement by emphasizing the satisfactions of individual success and the wisdom of deferring immediate satisfactions in order to achieve more distant goals. In various ways parents may express their expectations to their children by indicating how far they are expected to go in school, how well they are expected to do and what aspects of education are important." (1966)

The family relationships encountered by the child have an effect upon the level of academic achievement. Lanning and Robbins discuss the contributing factors with regard to family relationships that hindered the child from working to the level of his academic ability. They concluded that:

"Underachievement can be (1) the child's way of 'getting back' at his parents for some perceived fault such as rejection, over-severe demands, or favoritism for a brother or sister; (2) the result of a low level of aspiration on the part of the parents for the child; and/or (3) the results of poor self-concept originating in poor family relations." (1968, 133)

The influence of role relationships within the family on the student's academic performance is partly affected by the family's socioeconomic status. The higher the socioeconomic status of the family the more positive are the effects of the family and its internal relationships upon academic performance. Levine reviewed the work of Herriatt and St. John on the relationship of the socioeconomic status of the family and its effect on academic performance. He reported that teachers and principals of low socioeconomic status schools report more family instability, less parental support, and lower scholastic performance among their students than did teachers and principals in high socioeconomic status schools (1967).

The effects of family role evaluations upon the academic performance and educational aspirations of the student is affected by the structure of the parental authority. Ellis and Land studied the social mechanisms that lead lower-class youths to utilize college as a mobility channel. Their findings revealed upward mobility to be linked to a distinctive pattern of maternal authority within the nuclear family and to be dependent on external structures, such as schools, for support. Ninety-six per cent of the lower class youth cited one parent, usually both, as having influenced them to continue their schooling beyond high school. However, only 19 percent specifically cited the father as being responsible (1963).

Heath and Strowig (1967) conducted a study to predict occupational status of males who were not planning to attend college. They investigated the relationship between occupational status four years after high school graduation and several independent variables. This investigation was made by using multiple regression techniques. Their results suggested that family background is important, though not as important as high school achievement and post-high school training in predicting the occupational status. Sewell, Haller, and Strauss reviewed some 25 studies which related to educational and occupational aspirations. They tested the general hypothesis, "that level of educational and occupational aspirations of youth of both sexes are associated with the social status of the family". Data from a sample of high school seniors were collected and analyzed. It was found the youths' level of educational and occupational aspirations are associated with the social status of the family. When measured intelligence was controlled (1957) their analysis showed no relationship between the social status of the students' homes and their level of aspiration.

2.5 Level of Family Income as It Effects Academic Performance

Literature supports the concept that family income is a partial determinant of the grade level attained by a student. However, it is widely claimed that the lower the socioeconomic status of the student, the greater the probability that the academic performance will be low, and drop-out will occur at a lower grade level. Kadushin stated that "low-income means less likelihood of going beyond high school and greater likelihood of lower educational achievement" (1967).

Medsker and Tyent studied 10,000 students of the 1959 graduating classes in 14 midwestern communities. They reported that the scholastic ability and high school rank were closely related to college attendance. It was further revealed that the level of the fathers' occupation was more important than ability or high school record in determining who attends college (1965). Family income becomes a controlling factor in virtually every aspect of education as the family income determines, to a large degree, the socioeconomic status of the family. Davis and Lang believe the home background is a vital source of information about the disadvantaged student and that much of the underachievement is related to home background of the students, especially as it concerns the socioeconomic status and education of the parents (1960).

A study of "Vocational and Educational Goals of Rural Youth in Virginia" showed that the higher the level of



living, the greater the amount of financial assistance expected for education; and more parents and children in the low-level of living group felt that they would be unable to provide financial assistance (Bishop, 1965). The feeling that financial support for education from the parent is available is an important stimulus in encouraging students to perform at a high academic level and aspire for training at the post-high school level. If this ideal is to be achieved by low-income students, the level of academic performance and persistence becomes highly important.

The problem of persistence to completing high school becomes more accented among rural low-income school populations. The youth from low-income families are not in a favorable position to deal with society's complexities. Frequently they become isolated from tangible relations to the social structure. This condition is evident in the high school drop-out rate of rural poor. At each age between 14 and 24, lower proportions of rural than urban youth are enrolled in school. Non-enrollment was highest among rural-non-farm non-white males (Beegle and Rice, 1965, 3-18). Perhaps the attitude regarding persistence in high school of the disadvantaged rural youth can best be illustrated by observations recorded in a Lousiana study of rural drop-outs, both boys and girls, ages 16-19 years:

"Three-fifths of the boys and one-half of the girls did not regret leaving school, and over two-thirds of the boys and almost three-fourths of the girls reported that nothing would have kept them in school. The basic problem of the drop-out is, therefore, their apathy toward education, and their feelings that schooling has little or no relation to adult life." (Beegle and Rice, 1965, 136)

2.6 Summary

We believe that our selections from the voluminous literature on vocational and educational aspirations of high school youth reflect prevailing opinion among administrators and researchers with reasonable adequacy. It is clear that parental attitudes toward education have considerable effect on most of the children. These attitudes, in turn, tend to be related to the parent's own educational attainment, and to their occupational level. In this connection, the attitudes of both parents exert a significant effect, but that of the mother appears to exert a somewhat more persistent effect. Both as regards level of education and occupational and income level, the children in low-income rural areas are likely to be under a double handicap. Their parents manifest the effects of limited to poor educational opportunities in the same or similar rural areas which had prevailed in the previous generation. Meanwhile the educational standards and skill criteria for employment have increased steadily in the major urban employment centers. The high school youth today is therefore facing a still more difficult and more frustrating situation as he approaches early adulthood. For the Negro rural poor this means that even as opportunities in education, technical fields, and social institutions in general become more accessible, these youth are vulnerable to greater deprivation due to the inadequacy of their aspirations and skills for academic performance, and their inability to prepare for the higher competitive standards and the reduced market for unskilled workers.

For families dependent on public assistance, the absence of the father makes the problem of both the mother and the child more difficult and more discouraging. Children generally are motivated to emulate their parents both in educational attainment, and in level of vocational skill. Parental attainments may function as a lofty goal which the child frankly regards as very difficult of attainment, or they may constitute a negative goal level which the high school student feels that he already has surpassed. But the availability of the parental model affords the child a constant standard by which to gauge his day-to-day performance. When the father is not with the family, male children may feel particularly alienated to the authority system and the social system. Such children see no advantage to remaining in high school, and often exert no effort during the final years of compulsory schooling. It should not be surprising if the youth from public assistance families are found to be uninspired and unresponsive in their high school classes, and relatively low in vocational aspirations, if they have made any specific plans at all for their post-high-school period.

Low-income families are not usually very helpful in assuring their children of the necessary financial support to continue schooling after high school for those who do take reasonable advantage of learning and personal development opportunities in high school. Particularly if there are younger children at home, the parent in the low-income family is more concerned with hastening the time when the high school child will seek full-time employment and relieve the economic and social burdens on the family at home. Most of the family influences and probably the peer influences as well, tend to militate against such students making practical and realistic plans to continue their training either in or after high school.

It would appear from the foregoing that special and extensive research efforts are needed if the self-perpetuating alienation and maladjustment of the under-achieving and under-trained rural youth is to be ameliorated. One approach is to measure the capacity for positive influence on the part of the mother in the public assistance family, and to seek ways of improving her understanding of the expanding opportunities available through



the local high school training facilities, and for post-high-school training opportunities. A second possible avenue is to educate children at the earlier school levels on the opportunities for self help, and for financial assistance in continuing vocational or college level training after high school. Several of the studies reviewed here indicate that this training is too late in the high school period, and should be incorporated in the educational program at an earlier level.

A third approach is to seek means of building a positive self-concept, particularly in the deprived youth. Several of the studies have shown that the under-achiever tends to have a very unrealistic concept of himself, often linked to an unwillingness to try, and a presumed inability to make a successful personal adjustment to the changes which would be necessary for the student if he could shift to a higher level of productivity and success. Such adjustments are not usually perceived as threatening in the earlier school years, but may constitute a very difficult obstacle for a boy or girl from a deprived family when he is adjusting to the complex biological and social changes which confront the adolescent in high school.

Several factors have a major effect on the high school students adjustment, and on his planning for his future. Among these are parental attitudes, parents' educational and vocational levels, family income, and the way in which the student's family relates to him. He is also affected by his own self-concept, the kind of success he has experienced through his school career, and what adult models, if any, he has chosen for identification. The student is also affected and reinforced in his attitudes, depending on the attitudes and support of peers, teachers, and other adults from the larger community. Relationships between variables reviewed and their effects on students' academic performance appear to be rather complex. Studies made by educators, sociologists, psychologists, and investigators from other disciplines reveal a need for further research on the socioeconomic factors affecting low-income students' level of academic performance. The sections which follow will enable us to examine certain ones of these factors, and to provide some additional evaluation of their influence.

SECTION 3. METHODOLOGICAL FACTORS

3.1 Procedures of Planning

In this chapter we will describe the methods by which this study was developed, how the population was selected, how the questionnaire was developed, and how the data was collected and analyzed. One of the primary aims of the study was to investigate the effects of parental attitudes toward education, educational aspirations of parent and child, and, the source of family income on the academic performance of students from the four-thousand-dollar-or-lower income strata.

The basic plan of the Logan County Youth Study was jointly developed by the six members of the research team established by Langston University. (See Preface.)

Beginning in October 1967, a series of organizational and planning conferences were devoted to developing procedures for coordinating the research effort in conducting the overall project, and in integrating the specific interests and capacities of research members in a practicable and productive way. Special interests represented in the research team included diverse areas such as socioeconomic factors, vocations, welfare, and nutrition. These were to be incorporated into a study of high school youth in a predominantly agricultural area. The objective was to gather data which could lead to an improved understanding of the interplay of specific social, economic, cultural, and institutional factors in the evolving educational experience of high school students.

3.2 Selection of High School Students

A careful examination of alternatives for drawing a sample led repeatedly to the advantages of using all of the high schools in Logan County. Funds were limited, and all but two of the six members of the research team were full-time faculty, and as such, limited to quarter-time or to consultation status for research. The six high schools were well dispersed throughout the county and all but one were situated in towns of less than 1000 population. The total student population of grades 9 through 12 in September 1967 was about 900, which indicated a sufficient base for analysis of variously defined subgroups within the sample. Logan County is situated in the central part of the state, and is not among the richest or the poorest of Oklahoma's agricultural counties.

The research team also reviewed the overall Economic Development plan for the county and other school census data relevant to each high school. Dr. William H. Hale, President of Langston University, made the initial contact with the superintendents of schools and explained the proposed study. Official contacts on behalf of the research project were made by the authors. Subsequent personal discussions were held with each school superintendent during the month of December, 1967. The superintendents gave their approval contingent upon agreement of principals of the high schools to participate in the study. The researchers then conferred with the principals and counselors of each school, explained the research project, and secured their cooperation for participation in the project. At this conference, schedules for administering the student questionnaire were developed; and the number of students currently in attendance in the tenth, eleventh, and twelfth grades was determined.

3.3 State and County Departments of Institutions, Social, and Rehabilitative Services

Since this study involved students of welfare recipient families, it was necessary to work with the Department of Institutions, Social and Rehabilitative Services. The director of the project initiated contact with the State Director of Institutions, Social, and Rehabilitative Services to explain the research to be conducted in Logan County and to ascertain procedures for utilizing county records of Aid to Families of Dependent Children in Logan County. The State Director was assured that no member of the research team would need to see any of the case records, and that our only research requirement was to verify which families were currently receiving some form of assistance who also had children in any of the high schools in Logan County. We also assured the State Director that this information would be used only in statistical aggregates, and that no individual identifications would be made. Sufficient safeguard was thus provided to protect the records. Upon receipt of the State Director's approval, a personal visit was made to the Logan County offices of Institutions, Social, and Rehabilitative Services to discuss with the county director the research project and the types of information desired. The county director of this agency gave approval and explained the conditions under which the county AFDC records were to be utilized.

3.4 Instrumentation

Several instruments were studied and evaluated for possible use in the Logan County Youth Study. It was decided by the authors in conjunction with the research team that appropriate questionnaire instruments for use



with this study could be developed. The construction of the instruments for use was continued by members of the research team over a six weeks' period, developing questions and statements appropriate to the areas to be investigated. A final form of the instruments was agreed upon by the project director and the research team, and sample instruments were given to members of appropriate advisory committee and project consultants for comments and suggestions. Upon receipt of these evaluations and suggestions the necessary adjustments were made to correct the suggested weaknesses observed by committee members and consultants.

The instruments consisted of questionnaires for each student and the student's parents. The questionnaires were constructed so that specific but related questions were applicable to the students, their mothers, and fathers. The questionnaires were likewise designed so that certain information was reciprocally obtained.

The student questionnaire was constructed so that data could be obtained in four specific areas that the research team felt would have an effect on the students' academic performance. The first part of the student questionnaire was designed to secure statistical identification data about the student. Then a series of statements were developed to ascertain the students' perceptions of their level of academic performance, subject matter area that posed difficulty for the students, and their attitudes toward academic subjects. Also this part of the questionnaire was designed to secure data as to how the students rated themselves on selected items regarding academic abilities. Following these was a series of statements designed to secure data regarding the students' educational and occupational aspirations, factors influencing their aspirations, and their knowledge of post-high school institutions in Oklahoma.

The remainder of the questionnaire was designed to secure data to measure family role evaluations, students' perception of the parents' aspiration for them, and the economic ability of the family to help the student achieve his aspirations. Finally, the last part of the questionnaire was designed to ascertain data useful in evaluating the health and nutritional habits of the students.

The first part of the parent's questionnaires was designed to secure data on family role evaluation. The second part of the questionnaire was designed to secure data on the parents' aspirations for the child and their attitudes toward education. The last part of the questionnaire was designed to ascertain data for evaluating the economic level of the family, its potential for helping the child achieve his aspirations, and the degree to which families have been involved with professional change agents. This monograph has utilized selected items from the student's and mother's instruments only. Father responses were not considered in this study, because many of the families receiving public assistance do not have fathers at home. (See Appendices A and B.)

Pilot Testing:

The Cushing High School, Cushing, Oklahoma, in neighboring Payne County was chosen by the Logan County research team for pilot testing of the questionnaires. Cushing High School was chosen because of the close similarity of cultural, social, and economic features of this area to Logan County.

Two school classes totaling 36 senior students and their parents were involved in the pilot test. On January 16, 1968, the questionnaires were administered by two members of the research team. Questionnaires were mailed to the mothers and fathers of these students on the same day. They were asked to return the questionnaires within one week. To stimulate students and parents to return the parent questionnaires, forty cents per parent questionnaire returned was offered by the research project. A 52 per cent return of the parents' questionnaires was achieved. Upon return of the parents' questionnaires to the school, an evaluation of the students' and parents' questionnaires were made by the research team. Corrections were made in areas of the questionnaires where the pilot testing indicated that questionnaire items were ambiguous or of doubtful value. The questionnaires were then off-set printed in small booklets and prepared for administering to the high school student population of the Logan County study.

3.5 Administering the Instrument

The questionnaires were administered by designated teachers or counselors in each school. The research team developed a standard procedure and a set of instructions to students to be used by teachers at the six high schools in which the questionnaires were administered. The questionnaires were completed by all tenth, eleventh, and twelfth grade students, and were returned to the central office. Members of the research team then transposed data on level of academic performance for the preceding two regular school terms from the school records to each student's questionnaire. Members of the research team prepared the parents' questionnaires to be mailed to the mothers and fathers of the students on the date that the student questionnaires were administered. The questionnaires were mailed to the parents under a cover letter written to the parents and identifying the child by name, and sex to permit each parent to evaluate a specific child. The students were instructed to bring the parents questionnaires back to the school office within one week from the date on which the student questionnaires were administered. The



students were given fifty cents for each parent questionnaire returned, and ten cents was given to the school for each return handled. The returned parent questionnaires were collected at each high school included in the study one week from the date the student questionnaires were administered.

The families selected to be interviewed were administered an interview instrument, based on the mother's questionnaire. The interview sample was determined by identifying welfare recipient parents who did not return the parent questionnaires that were mailed in the earlier stages of the data collection.

3.6 Description of the Population

The population selected for this study included all low-income students enrolled in the tenth, eleventh, and twelfth grades in the five high schools in Logan County as of the date of administering the instruments. The students were classified as low-income based upon their parents statements that the family's annual income was four thousand dollars or less. Most of the population's residents were outside the incorporated city limits of Guthrie, Oklahoma—the only city in the county that could be classified as urban. Therefore, the major portion of the population could be classified as rural or rural-oriented.

The subjects in this study included 60 students from families who were receiving aid to families of dependent children, administered through the Department of Institutions, Social and Rehabilitative Services, and a control group of 85 students from families with an annual income of four thousand dollars or less and not participating in public assistance programs. This provided a total of 145 subjects who completed student questionnaires, where questionnaire responses were also available from the mothers. The adult subjects included in this sample are thus the mothers of the students in the sample and were selected by the same criteria.

3.7 Design of the Study

It was generally agreed that several factors exist that possibly have a differential effect on the academic performances of students of public and nonpublic assistance families. This study is designed to explore the effects on the AFDC family and the childrens' economic and social and developmental conditions. The treatment group is based upon the family's receipt of public assistance.

A quasi-experimental design, which is a static group comparison type, consisting of a single treatment group was used. The groups were determined by identifying students and parents of families who were receiving AFDC payments as of January 28, 1968. Classifications were determined from the county Department of Institutions, Social and Rehabilitative Services records.

The criteria for including subjects in the treatment group were:

- 1. Students and their parents or guardians must be receiving AFDC or other welfare payments as indicated by county office records on or before January 28, 1968.
- 2. The students must be classified as a tenth, eleventh, or twelfth grader by public school and/or welfare records.
- 3. The students must have been present in the high schools on the date of administering the student questionnaire.

Twenty students of welfare recipient families were absent on the days that the student questionnaires were administered in the Logan County high schools. Consequently, those students were not included in the study.

The design of this study is substantially weaker than it would have been had randomization been possible in selecting the schools which were included in the study.

The <u>ex post facto</u> design was chosen because of the very limited possibility of manipulating relevant variables, lack of randomization, and the possible risks of interpretation. For most of the factors evaluated, the <u>ex post facto</u> design is the only design possible. Regarding this type of design research, Kerlinger concludes:

"Despite its weaknesses, much ex post facto research must be done in psychology, sociology, and education simply because many research problems in the social sciences and education do not lend themselves to experimental inquiry. A little reflection on some of the important variables in educational research—intelligence, aptitude, home background, parental uporinging, teacher personality, school atmosphere—will show that they are not manipulable. Control inquiry is possible, of course, but true experimentation is not. Sociological problems of education . . . are mostly ex post facto in nature. Even if we would avoid ex post facto research, we cannot. (1966, 372)

Since randomization was a problem in this study, the research design follows closely Campbell and Stanley's suggestion of pre-experimental design. These authors suggest there are natural social settings offering opportunities for experimental research (1963, Chapter 5). More specifically the design of this study might be perceived as a



"static-group comparison" design. Campbell and Stanley contend: "This is a design in which a group which has experienced X is compared with one which has not, for the purpose of establishing the effect of X." (1963)

The study utilizes Campbell and Stanley's concepts of research design because it was not feasible to randomly select the schools included in the study. Also, it was not feasible to randomly assign students to the control or treatment groups. It was feasible, however, to randomly select the sample from the non-welfare recipient population. The weaknesses of this design are recognized by the authors. However, in view of the nature of this study, the research design used is a feasible design. Researchers who believe ex post facto research is useful contend the designs are not weak in and of themselves, but rather that the results and interpretations must be cautiously drawn.

3.8 Data Analysis and Statistical Treatment

The data for this study were collected through questionnaires administered to the students in a school setting, mailed questionnaires to some parents, and a personal interview of welfare recipient parents who did not return the questionnaires. Upon completion of the data collection, the research team coded the data, and the Langston University data processing center keypunched the cards and properly verified the cards. The research director prepared the computer programs and processed the data at the Oklahoma State University Computer Center. The treatment of the data involved statistical treatments that are classified as parametric and non-parametric. The non-parametric tests used in this study are chi-square test, Mann-Whitney U test, and the Kruskal-Wallis one way analysis of Variance test (Siegel, 1956). The parametric test used in this study is the Pearson product-moment correlation coefficient. The scores used in computing the coefficients of correlation are developed from aggregates of ordinally scaled blocks of items in the questionnaire. Data that are not treated statistically will be analyzed by using frequency counts and percentages.

SECTION 4. EFFECTS OF SOCIAL AND ECONOMIC FACTORS ON PERFORMANCE AND ASPIRATIONS

4.1 Academic Performance of Public and Nonpublic Assistance Students

As noted earlier in Section 1, this study has a four-fold objective. The first is to investigate the effects the source of family income has on the disadvantaged students' level of academic performance. The second objective is to investigate the family role evaluation by parent and child to determine its affects on aspiration and level of academic performance. The third objective is to determine similarities or differences between students' aspiration for themselves and the mothers' aspiration for the students. Fourth, we are interested in the students and the mothers attitudes toward education. In the tables which follow, the number of cases varies depending on the number of respondents for each item. There were a total of 85 students and mothers of nonpublic assistance families and 60 students and mothers of public assistance families, representing a maximum of 145 sets of respondents.

Hypothesis One: Public assistance and nonpublic students will differ in perception of their level of academic performance, and nonpublic assistance students will have a higher recorded level of academic performance.

Usable data were collected on 53 students of public assistance families and 82 students of nonpublic assistance families. A Chi Square test for K independent samples as described by Siegel was used to test the hypothesis (1956, Chapter 8). Frequency counts and percentages are also used in analyzing levels of academic performance.

The students' perception of their academic level of performance was ascertained by asking the students to give the letter grade that best represented their academic performance level for the preceding two regular school terms. A comparison was then made to determine whether claimed academic performance, that is, grade point average, was higher, lower, or equal to the actual performance level as shown in the school records.

Analysis of Perceived Levels of Academic Performance:

Table I summarizes the findings on levels of academic performance by percentages. A very small percentage of the nonpublic assistance students perceived their academic performance at the "A" level. This represented perceived performance higher than recorded level. It is noticeable that these students were actually performing at the "B" level. Students of the public and nonpublic assistance groups were almost equally perceptive of their level of performance at the "B" level. At the "C" level, slightly more public assistance students (11.2%) than nonpublic assistance students (9.8%) perceived their level of academic performance higher than the recorded level. Perceived performance lower than recorded, showed more distinct differences at the "B" level. It is seen from Table I that only nonpublic assistance students perceived academic performance lower than the actual level of academic performance at the "B" level. The greatest percentage difference in perception of academic performance at the same level as the recorded level was at the "C" and "B" levels. Almost no difference in perceptions of performance at the "D/F" levels was found.

A Chi Square test was calculated to test the difference between the public assistance and nonpublic assistance groups' perception of academic performance levels. The Chi Square analysis of the data on perceived grades is presented in Table II. The table shows that the difference in perceived grades between public assistance and nonpublic assistance students is not significant at the .05 level of confidence.

Analysis of Recorded Levels of Academic Performance:

Table III shows the Chi Square analysis of recorded levels of academic performance for the two groups in this study. The Chi Square analysis of these data revealed a significant difference of recorded levels of academic performance between the public and nonpublic assistance students. The public assistance student's records reflect lower performance levels.

Analysis of academic performance levels was concluded by making a percentage comparison of the students' performance at each letter grade level. Table IV shows the comparison. It is also clear from Table IV that students of nonpublic assistance families have higher percentage levels of academic performance at the "A" and "B" levels. The students of public assistance families have a higher percentage level of academic performance at the "C" and "D" levels. However, the difference at the "D/F" levels was slightly more than 1.5 per cent.

Students' Self-Concept of Academic Abilities and Confidence of Success:

The self-concept of the students was analyzed with respect to source of family income, race, grade, level of education aspired, and level of academic performance. To secure data to analyze this aspect of self-concept, the



TABLE I

PERCENTAGE COMPARISON OF PERCEIVED AND RECORDED
LEVELS OF ACADEMIC PERFORMANCE

Levels of	Letter	Nonpublic	: Assistance	Public Assistance		
Student's Perception:	Grade:	Perceived:	Recorded:	Perceived:	Recorded:	
		n =	= 82	n =	53	
Perceived Performance	A	4.9		_		
Higher than Recorded	В	6.0	4.9	7.6		
	C	9.8	6.0	11.2	5.7	
	D/F	-	9.8		13.1	
Perceived Performance	A		1.2		443	
Lower than Recorded	В	1.2	3.7		5.5	
	C	3.7	1.2	5.5	3.7	
	D/F	1.2		3.7		
Perceived Performance	A	4.9	4.9	1.7	1.7	
& Recorded Equivalent	В	29.3	29.3	18.6	18.6	
	C	36.6	36.6	49.8	49.8	
	D/F	2.4	2.4	1.9	1.9	
Total		100	100	100	100	

TABLE II

ANALYSIS OF PERCEIVED LEVEL OF ACADEMIC PERFORMANCE FOR STUDENTS OF PUBLIC AND NONPUBLIC ASSISTANCE FAMILIES

	Level of Academic Performance							
Group:	A	В	C	D or Lower	Total			
Public Assistance	1	14	35	3	53			
Nonpublic Assistance	8	30	41	3	82			
Total	9	44	76	. 6	135			
Chi Square = 5.90		df=	3	p > .0)5			

TABLE III

ANALYSIS OF RECORDED LEVEL OF ACADEMIC PERFORMANCE FOR STUDENTS OF PUBLIC AND NONPUBLIC ASSISTANCE FAMILIES

	Level of Academic Performance							
Group:	A	В	C	D or Lower	Total			
Public Assistance	1	12	32	8	53			
Nonpublic Assistance	5	31	35	11	82			
Total	6	43	67	19	135			
Chi Square = 11.20		d f =	3	p < .0	2			

TABLE IV

PERCENTAGE COMPARISON OF LEVELS OF ACADEMIC PERFORMANCE FOR PUBLIC ASSISTANCE AND NONPUBLIC ASSISTANCE STUDENTS

Letter Grade	Public	Assistance	Nonpublic Assistance		
Level:	n	%	n	%	
A	1	1.9	5	6.1	
В	12	22.6	31	37.8	
C	32	60.4	35	42.7	
D/F	8	15.1	11	13.4	
Total	53	100.0	82	100.00	

students were asked to rate themselves on a five point scale on ten academic activities. (See Items 22 through 31 of the student instrument, Appendix A). The students were also asked to indicate the degree of confidence of succeeding in their aspired post-high school plans (see item 43, Appendix A). How they conform to the expectations of others was also indicated in the questionnaire.

The results of the Mann-Whitiley Test regarding confidence of achieving aspired plans after leaving high school, students' rating themselves in areas of academic activities, and conformity to the expectations of others are presented in Table V.

Table V shows students' concepts of their abilities in the academic areas of activities were not significantly affected by source of family income or race variables at the .05 level of significance. The small differences which exist could readily be attributed to chance variation. The same conclusion applies to students' concept of their abilities to succeed in post-high school plans and their concept of their conformity to expectations of other individuals have for them.

The data on students' self-concepts were further analyzed to determine whether the variables of grade in school, level of aspired education, and academic performance levels significantly effected the students' confidence and conformity levels. The results of the Kruskal-Wallis test are presented in Table VI.

It is shown from the table that the students' concepts of their academic abilities and confidence in succeeding in aspired post-high school plans were not significantly effected by the grade, aspiration, or academic performance variables. However, the students' concept of their conformity to the expectations of others was significantly effected by the level of education aspired at approximately the .01 probability level. This finding suggests that the expectations of others steadies and sustains the educational aspiration regardless of source of income or race.

Summary on Academic Performance:

In summary, these findings disclose little difference between the two groups at the upper and lowest level of academic performance. The public assistance students were more accurate, however, than the nonpublic assistance students in their perception of academic performance at the "C" level. No public assistance students perceived their academic performance at the "A" level, and school records showed a lower level. The only statistically significant difference found between the two groups in this study was in the recorded levels of academic performance. The perceived levels of academic performance was not significantly different for the two groups.

The analysis of students' concepts of their academic abilities and confidence of succeeding in post-high school plans was not significantly related to the variables of grade, level of aspirations for education, or level of academic performance. It does appear from this study that students' concepts of their conformity to the expectations of others was significantly effected by level of aspired education. The correlation analysis of the three criteria of students' concepts showed no significant functional relationships. Hypothesis One is not tenable, and source of income does not affect perceived grades, but it does affect recorded grades.

4.2 Role Evaluation of Family Relationships

Hypothesis Two: Evaluation of family roles within the family is significantly effected by source of family income, aspired level of education, and levels of academic performance.

Data used in this study to analyze aspects of family relationships were secured through intrinsically related sets of items of the student and parent questionnaires of the Logan County Youth Study. Included were 57 items on pages three through six of the student's questionnaire, Appendix A, and nearly all items from the mother's questionnaire, Appendix B. The items refer to activities in which students and their mothers participate. These items related to parental help with personal and school problems, making decisions, and giving helpful advice to the child. Four items related to the student's rating of how much love he has for his mother and the mother has for him, students' rating of the mothers, mothers' rating of the students, and students rating of themselves, respectively. Finally, items were selected which indicated the mood of the parent and the student, the pattern of discipline, reactions of parent to student's misbehavior, and parent's actions and rewards for good behavior.

Evaluation of Family Roles by Source of Income and Race:

The Negro and white categories constituted the race variable and receipt or non-receipt of welfare constituted the public and nonpublic assistance variable. The analysis of the effects of parental activity, help with personal and school problems, helpful advice, the amount of love, rating of parent and child, the mode of parent and child, and the degree of discipline are presented in Table VII.

It is observed from Table VII that the race and source of income variables slightly affected only two of the six aspects of family relationships. A highly significant difference of the effect of discipline is shown by Z values of

TABLE V

SELF-CONCEPT OF ACADEMIC ABILITIES AND CONFIDENCE OF SUCCEEDING IN **POST-HIGH SCHOOL PLANS***

	Variables									
	Sour	ce of Inco	me		Race					
Self-Concepts:	Z	P	N	Z	P	N				
Students' abilities in academic areas	0.66	0.519	85	0.04	0.963	85				
Students' confidence in succeeding in post high school plans	1.06	0.288	114	0.28	0.776	114				
Students' conformity to expectations of others	0.26	0.791	105	0.31	0.756	105				

^{*}Mann-Whitney Test. Direction not predicted.

TABLE VI STUDENTS' CONCEPT OF ACADEMIC ABILITIES, CONFIDENCE AND CONFORMITY TO EXPECTATIONS*

		Academic Abilities df:2			Confidence of Succeeding df:4			Conformity to Expectations df:3		
Variables	Н	P	n	H	P	n	Н	P	n	
Grade	0.11	.950	85	0.29	0.990	114	0.54	0.900	105	
Level of Aspirations	3.23	0.200	67	6.18	0.190	90	9.42	0.030	96	
Level of Academic Performance	4.11	0.150	67	0.13	.995	90	0.08	.990	96	
*Kruskal-Wal	lis Test.									

TABLE VII

ROLE EVALUATION OF ASPECTS OF FAMILY RELATIONSHIPS*

	Variables									
Aspects of Family Role Evaluation	Sou Z	rce of Incom P	ne n	Z	Race P	n				
1. Parental activity	0.70	0.255	118	0.16	0.433	118				
2. Parental help with problems	0.50	0.312	120	0.07	0.470	120				
3. Rating of parent and child love	0.57	0.288	121	2.00	0.021	121				
4. Rating of child and mother	0.43	0.360	114	0.23	0.408	114				
5. Mood of family	0.94	0.174	129	0.64	0.266	129				
Rating of discipline	2.25	0.012	142	3.08	0.003	142				

^{*}Mann-Whitney Test. Direction not predicted.

TABLE VIII

EVALUATION OF FAMILY ROLES BY GRADE, ASPIRATION AND ACADEMIC PERFORMANCE*

	Grade df=2		As	spiration df=4		Acaden	nic Perfo df=3	rmance
H	P	n	H	P	n	H	P	n
3.58	0.134	99	9.87	0.007	83	15.57	0.001	83
3.04	0.295	119	16.80	0.001	98	8.98	0.002	98
0.71	0.515	121	1.17	0.632	96	1.89	0.521	96
3.15	0.190	107	5.21	0.259	86	5.62	0.086	86
1.42	0.549	92	5.79	0.194	82	2.70	0.565	82
1.26	0.532	141	16.78	0.001	122	0.70	0.548	122
	3.58 3.04 0.71 3.15	df=2 H P 3.58 0.134 3.04 0.295 0.71 0.515 3.15 0.190 1.42 0.549	df=2 H P n 3.58 0.134 99 3.04 0.295 119 0.71 0.515 121 3.15 0.190 107 1.42 0.549 92	H P n H 3.58 0.134 99 9.87 3.04 0.295 119 16.80 0.71 0.515 121 1.17 3.15 0.190 107 5.21 1.42 0.549 92 5.79	df=2 df=4 H P n H P 3.58 0.134 99 9.87 0.007 3.04 0.295 119 16.80 0.001 0.71 0.515 121 1.17 0.632 3.15 0.190 107 5.21 0.259 1.42 0.549 92 5.79 0.194	H P n H P n 3.58 0.134 99 9.87 0.007 83 3.04 0.295 119 16.80 0.001 98 0.71 0.515 121 1.17 0.632 96 3.15 0.190 107 5.21 0.259 86 1.42 0.549 92 5.79 0.194 82	H P n H P n H 3.58 0.134 99 9.87 0.007 83 15.57 3.04 0.295 119 16.80 0.001 98 8.98 0.71 0.515 121 1.17 0.632 96 1.89 3.15 0.190 107 5.21 0.259 86 5.62 1.42 0.549 92 5.79 0.194 82 2.70	H P n H P n H P n H P n H P n H P n H P n H P n H P n H P n H N P n H N N N N N N N N N N N N N N N N N N

^{*}Kruskal-Wallis Test.

2.25, 3.08, and calculated probabilities of 0.012 and 0.003 for source of income and race, respectively. The racial classification also affects the rating of the students' love for their mothers and the mothers' rating of love for the children. From this data it would appear that of the significant role aspects of family relationships, discipline has a stronger effect than the love aspect.

The aspects of family relationships were further analyzed with respect to the variables of grade in school, aspiration, and performance level. The tenth, eleventh, and twelfth constituted the grade variable. The aspiration variable referred to levels of education to which the students aspired. The aspired levels were drop-out of high school, graduate from high school, complete college, and complete a graduate degree. The performance variable referred to the grade average of academic performance (A, B, C, D/F) for the preceding two regular terms. The Kruskal-Wallis test was used to analyze the role evaluation of family relationships as presented in Table VIII.

The table shows that the extent of parental activities have significant effects on aspired level of education and levels of academic performance generally at the .001 level of significance. It is also noticeable that the amount of parental help given the child with personal problems, school problems, and making decisions significantly affected the aspired level of education and academic performance. Reference to Table C also shows the H value of 16.78 (df = 4) for the pattern of discipline to exert a highly significant effect on the child's aspired level of education (Campbell and Stanley, 1963). The aspects of family relationships investigated were not significantly affected by the grade in school. It is further evident from Table VIII that grade, aspiration, and academic performance did not significantly affect the mood ratings.

To further analyze the family role evaluation of low-income families, a correlation coefficient was calculated to analyze the degree of relationships between the roles. The analysis of the role evaluation is presented in Table IX. Table IX shows a significant correlation (.36) between the roles of parental activity and parental help the child received with personal problems, school problems, and helk in making decisions, indicating a 12.9% functional relationship between these two roles. Table IX reveals significant correlations for the roles of parental help with problems and decisions and the rating of parent and child, mood of the parent, and discipline. The strongest relationship exists between the rating of parent and child and the mood roles. It may be noticed that the weakest relationship exists for the rating of parent-child and the discipline role.

Health Aspects of Public and Nonpublic Assistance Families:

The health variable of the public and nonpublic assistance families was analyzed by using four aspects. The aspects were (1) number of meals eaten together by family members, (2) likes or dislikes for foods, (3) health rating of the family, and (4) adequacy of the diet.

The data to analyze the health variable were collected through selected items from pages 7-10 of Appendix A, of the student instrument for the Logan County Study. The items were designed to measure specific foods eaten on the previous day and to measure the extent of the student's likes on the food list. Also, the items measured the present health rating of the student (see Appendix A).

Health Aspects by Source of Assistance and Race:

The relations involved with health, race, and type of family assistance variables were evaluated by means of the Mann-Whitney test. The statistical results of the health variable are presented in Table X. It can be noted from the table that the rating of the family health was significantly affected by race variable at the 0.001 level of probability. Also, food eaten the previous day was significantly affected by race at the .02 level; food liked was significant at the .01 level. None of these variables were significantly affected by the source of income variable.

Aspects by Grade Level of Aspiration and Performance:

The health aspects of the family were analyzed with respect to the students' grade levels, aspirations, and academic performance by using the Kruskal-Wallis test, as shown in Table XI. The table shows the H value of 7.85 for the aspect extent of likes for food and the academic performance variable. This value is significant at the .012 level. No significant relationship was found between the health aspects of the family and the grade, nor the aspiration variable.

The health aspects of the family were analyzed to determine the functional relationship between the health aspects of the family. The correlation analysis is presented in Table XII (Ferguson, 1966, Appendix). It was observed that significant correlations were found between the family meals eaten together, foods likes or disliked, adequacy of diet, and the lating of the family's health. Also, there is a strong functional relationship between foods liked and health (r = 0.64; $r^2 = 40.9\%$). From Table XII adequacy of diet also shows a significant r value (.38).

Summary of Role Evaluation:

After analyzing the family relationships, it was found that the amount of love perceived by the parent and



TABLE IX

CORRELATION OF FAMILY ROLE FACTORS

AND FAMILY RELATIONSHIPS

Aspects of Family Relationships	Parental activity	Parental help on problems	Rating of love	Parent-child Ratings	Mood of parent	Rating of discipline
	r	r	r	r	r	r
1. Parental activity	1.00	0.36*	0.00	0.21	0.09	0.20
2. Parental help with problems		1.00	0.00	0.41*	0.44*	0.35*
3. Rating of love			1.00	0.00	0.00	0.00
4. Rating of parent- child				1.00	0.50*	0.24*
Mood of parent- child					1.00	0.11
6. Rating of discipline						1.00

n = 131 *Significant results between the aspects at .01 level of confidence. (Edwards, 1946, 331)

TABLE X

ANALYSIS OF HEALTH OF THE FAMILY BY RACE AND SOURCE OF INCOME*

	Variables									
	Sou	irce of Incon	ne		Race					
Health Aspects:	Z	P	n	Z	P	n				
Family meals eaten together	0.43	0.355	144	0.43	0.336	144				
2. Foods eaten previous day	0.11	0.454	129	1.79	0.024	129				
3. Like or dislike of foods	0.97	0.333	82	2.15	0.014	82				
4. Rating of child's health	0.72	0.261	118	3.17	0.001	118				
5. Diet adequacy	1.29	0.098	120	0.14	0.442	120				
*Mann-Whitney Test.										

TABLE XI

ANALYSIS OF HEALTH ASPECTS OF THE FAMILY
BY GRADE, ASPIRATION, AND PERFORMANCE*

				•	/ariables				
Health Aspects	Grade df: = 2			Aspir	Aspiration df: = 4			Acad. Perf'ce df: = 3	
of the Family:	Н	P	n	H	P	n	Н	P	n
1. Family meals eaten together	0.86	0.510	144	0.62	0.570	144	2.19	0.502	144
2. Foods eaten previous day	0.49	0.547	129	2.20	0.599	104	2.80	0.579	104
 Food liked or disliked 	1.54	0.564	82	8.48	0.028	62	7.85	0.012	62
4. Rating of child's health	2.18	0.341	118	9.23	0.014	102	5.59	0.089	102
5. Adequacy of diet	1.05	0.516	120	5.20	0.259	100	2.05	0.514	100
*Kruskal-Wallis Test.									

TABLE XII

CORRELATIVE ANALYSIS OF THE HEALTH ASPECTS OF THE FAMILY

	Health Aspects of the Family							
Health aspects of the family:	Family meals eaten together	Foods eaten previous day	Foods liked or disliked	Rating of family health	Adequacy of diet			
	r	r	r	r	r			
Family meals eaten together	1.00	0.00	0.48*	0.66*	0.24*			
2. Food eaten previous.day		1.00	0.00	0.00	0.00			
3. Foods liked			1.00	0.64*	0.25*			
4. Rating of family health				1.00	0.38*			
5. Adequacy of diet					1.00			

n = 131 *Significant results at the .01 level of confidence. (Edwards, 1946, 331)

child was significantly effected by race. The perceptions of the nature of discipline for good or bad behavior by students and parents were significantly effected by the source of family income and race. The aspects of relationships referred to as parental activity and help with the child's personal problems, school problems, and making decisions were significantly effected by aspired level of education and academic levels of performance. None of the role evaluations of family relationships was effected by the grade levels. The correlation analysis of family relationships showed rather strong functional relationships for parental activity and parental help students get with personal problems, school problems, and helpful advice. Significant correlations were also found for the help the students get with problems, rating of parent and child roles, and the nature of discipline.

The foods eaten the previous day, foods liked, and rating of the family's health showed significant differences by race. The aspects were not effected by the source of family income variable at the .05 level. The food liked or disliked was not related to grade or level of education aspired but was highly significantly related to the level of academic performance. The variables, grade in school, aspired level of education, and level of academic performance had no significant effect on any of the health aspects investigated. The correlation analysis of family health aspects showed strong functional relationships between four of the five factors.

The evaluation of intra-family relationships of low-income families in the preceding statistical analyses supports the conclusion of the researcher that the hypothesis, "evaluation of family roles within the family is significantly affected by source of family income, aspired level of education, and levels of academic performance," is tenable.

4.3 Analysis of Parent's and Child's Occupational Aspirations

Hypothesis Three: There is a positive relationship between parent's and child's educational and occupational aspirations, and attitudes on education.

The data used in the analysis of this hypothesis included items 35, 38, and 39 in Appendix A, page 5 of the students' instrument, as a measurement of the students' aspiration level, and Item 33 of the mothers' instrument, Appendix B, page 2, as a measurement of the mother's aspiration for the child. The responses were rated by the North-Hatt Social Prestige Scale (Hatt and North, 1947, 3-13). The results of the comparison are shown in Table XIII.

Student Aspirations:

It may be observed from Table XIII that job aspirations and work attitudes were not significantly effected by race, or by the source of income. The differences which may be ascribed to these two variables are small. The aspiration rank distributions were also analyzed with respect to the variables grade, level of education aspired, and level of academic performance by the Kruskal-Wallis test, as shown in Table XIV. No significant effects are attributable to grade level. Table XIV shows that jobs low-income students aspire to (ten years from now) were significantly effected by level of academic performance at the .01 level of significance. The table also shows the aspired job the students expected was significantly effected by level of education aspired at the .01 level of significance. The small H-values for grade in school provide no support for the hypothesis that there are significant changes from year to year in job preference or job expectation in the career years. But there is strong evidence for a relationship between job preference level and academic performance level. Educational aspiration is also affected by job expectation.

The job aspirations were further analyzed by correlation coefficient. The r analysis is presented in Table XV. It is evident from Table XV that significant relationships exist between the aspired jobs low-income students would like to have and the jobs they expect to have ten years from now. There is also a significant relationship between the job the students expect to have ten years from now and their attitudes toward work. This finding is of the most practical significance because it indicates a reasonable recognition of the relation between work attitudes and anticipated vocational success. The expectations are realistic, and suggest a sound adjustment to the requirements of adult vocational experience. The low correlation between job preference and work attitudes suggests that some of the students will be less than satisfied with the jobs to which they will be restricted, but they will anticipate and pre-adjust to the dissatisfaction.

Comparison of Students' and Mothers' Job Aspirations:

The data on the mothers' job aspirations for the students were analyzed by percentages. The responses of mothers with respect to aspired jobs for the child were rated by the North-Hatt Scale (Hatt and North, 1947). The North-Hatt ratings on mothers' job aspirations for the child were compared to the North-Hatt rating given the student's job choice. Frequency and percentage of the mother's job aspirations for the child are given in Table XVI.



TABLE XIII

ANALYSIS OF PARENT'S AND CHILD'S ASPIRATIONS*

Level of Job Aspired as rated	Source of Income			Race	Race	
North-Hatt Scale:	Z	P	n	Z	P	n
Job would like to have 10 years hence	0.62	0.271	100	0.89	0.311	100
Job expect to have 10 years hence	0.99	0.337	142	0.59	0.280	142
Job attitudes	0.07	0.472	100	0.31	0.375	100
*Mann-Whitney Test.						

TABLE XIV

ANALYSIS OF JOB ASPIRATION BY GRADE, EDUCATION LEVEL ASPIRED AND LEVEL OF ACADEMIC PERFORMANCE*

Level of Job Aspired as Rated by North-Hatt Scale:		Grade in School df = 2		Variables Level of Education Aspired df = 4			Level of Academic Performance df = 3		
	H	P	n	H	P	n	H	P	n
Job would like 10 years hence	0.26	0.665	100	6.30	0.147	81	8.69	0.003	81
Job expected 10 years hence	1.11	0.519	142	9.84	0.007	111	3.09	0.380	79
*Kruskal-Wallis Test									

TABLE XV

RELATIONS BETWEEN JOBS PREFERRED AND JOBS EXPECTED, AND ATTITUDES TOWARD WORK

Level of Job Aspired as Rated by North-Hatt Scale:	Job Would Like 10 yrs. Hence:	Job Expect 10 years Hence:	Work Attitudes:	
	r	r	r	
Job Would Like 10 Years Hence	1.00	.34	.24	
Job Expect 10 Years Hence		1.00	.45	
Work Attitudes			1.00	

n = 131 All values are significant at the .01 level of confidence. (Edwards, 1946, 331)

TABLE XVI

COMPARISON OF MOTHER'S JOB ASPIRATION FOR CHILD BY NORTH-HATT SCALE

Mother's Aspired Job for Child:	Public Assistance %	Nonpublic Assistance %
	n 52	n 81
Higher than		
Child's	17.3	12.3
Same as Child's	25.0	24.7
Lower than Child's	57.7	63.0
Total	100.0	100.0

Table XVI shows that less than 20 per cent of the public and nonpublic assistance mothers aspired jobs for their children which were of a higher social prestige level than their children. Only one-fourth of both groups of mothers aspired to jobs for their children that were equal to jobs their children aspired to for themselves. More than half of the public assistance mothers and nearly two-thirds of the other mothers aspired to jobs below those jobs aspired to by their children. The two groups of mothers are not significantly different from each other (Chi Squared = .719, p = .70, df = 2), but both groups manifest a low degree of both interest and influence in their childrens' vocational aspirations. Since the mother is the only available parent for most of the public assistance group we must postulate a low level of parental attention to this aspect of the children's maturation and preparation for adult vocational applications. The large percentage of mothers in both groups who aspired jobs for their children having a lower North-Hatt rating is attributed to the fact that many mothers gave neutral responses on job aspirations, such as "I would like any job just so it is a good job." Such responses were considered to reflect a lower rating than the rating given the child's job aspiration. There were 32 nonpublic assistance mothers and 22 public assistance mothers who gave such responses.

4.4 Mothers' and Childrens' Attitudes Toward Education

The students' attitudes were investigated by calculating a score based on the number of courses in school liked and courses disliked, and preparation for attending college, along with the amount of education they thought they needed for the aspired jobs and the amount of education the students thought the person they would marry should have. Data on attitudes of the mothers were secured by asking how much education she thought the person her child would marry should have.

The results of the Mann-Whitney test on the degree of liking for courses taken by students, and their preparation for college was highly significant. The number of courses liked or disliked and college preparation were analyzed with respect to public or nonpublic assistance variables. A Z-score value of 2.06 with an associated probability of 0.019 was obtained for 133 students included in the analysis. Therefore, the number of courses taken in high school that are liked or disliked and the planning for college are significantly affected by the source of family income at the 0.02 level of probability.

The attitudes of the students toward the number of courses liked or disliked and college preparation were analyzed with the race variable. The analysis of 133 students showed a Z value of 1.85 with a calculated probability of 0.032. It is evident that race also has a significant effect on the degree of liking for school courses and the amount of preparation for college.

To further analyze the attitudes of low-income students toward courses taken and college preparation, a Kruskal-Wallis test was used to analyze the significance of grade level on educational aspiration, and on level of academic performance.

Table XVII shows the students' attitudes toward the courses in which they are enrolled and preparation for college have a significant relation to the level of academic performance. Grade in school also exerts a differential effect on course attitudes and college preparation. This suggests a progressive adjustment through the three years of high school.

The data on amount of education needed for the aspired job and the amount of education the students' spouse should possess was analyzed by frequency counts and percentage for student responses. The analysis on students' responses on the amount of education thought to be needed for their aspired job is shown in Table XVIII.

Table XVIII shows so little percentage difference (1.3%) between public assistance and nonpublic assistance students' belief that a statistical test would be superfluous. The two groups appear to be similar in all except vocational school aspirations. The greatest difference on belief about the level of education needed for the aspired job between the two groups was at the vocational or business school level. The small differences which exist between the two groups with respect to college and professional school could be ascribed to chance variation. Approximately three-fourths of both groups aspire to college training, and to higher vocational levels than those reflected by their families.

The levels of education which mothers thought students would need for the job they aspired for the students is indicated in Table XIX. It is shown from the table that the percentage of public and nonpublic assistance mothers do not differ significantly regarding the level of education they thought the students needed for the job they aspired for them (Chi Squared = 1.632, df = 3, p = .68). The difference was 3.2% at the high school level, 5.3% at the vocational or business school level, and 5.6% at the college level. It can be observed that the greatest difference (9.6%) in perceived level of education the mothers thought students needed for the job they aspired for them occurred at the professional school level. More of the public assistance mothers thought their children needed a high



TABLE XVII

ANALYSIS OF ATTITUDES TOWARD COURSES ENROLLED AND COLLEGE PREPARATION*

Variables:	df:	Degree of Course Liking and College Preparation:			
		H	. P	n	
Grade	2	5.32	0.018	133	
Level of Education Aspired	4	6.93	0.097	112	
Level of Academic Performance	3	8.37	0.004	112	
*Kruskal-Wallis Test					

TABLE XVIII

STUDENT RESPONSES ON LEVEL OF EDUCATION NEEDED FOR THE ASPIRED JOB

Level of Education to be Completed for Job

	High	Voca'l	College	Prof'l	T	otal
Group:	School %	School %	%	School %	n	%
Public Assistance	9.2	13.0	61.1	16.7	54	100.0
Nonpublic Assistance	8.0	20.0	57.0	14.3	82	100.0
Total					136	100.0

school or professional level of education for the aspired jobs. One may observe that approximately 70 per cent of the mothers in both groups thought the students should have a college level of education for the job they aspired for them.

Students' and Mothers' Attitudes on Amount of Education the Spouse Should Possess:

The data on attitudes of the amount of education the student's spouse should have were obtained by asking tudents and their mothers identical questions. The mothers were asked: "How much education do you think the person your child marries should have?" The students were asked: "How much education do you think the person you marry should possess?" The five levels of choices were high school, business school, vocational school, college, and professional school. For the purpose of analysis business school and vocational school were combined and categorized as vocational school.

Seventy-seven of the 82 nonpublic assistance mothers responded to the question and 55 public assistance mothers responded. Seventy-seven nonpublic assistance students gave usable responses to the student question. Five of the 82 students were already married. Fifty-six of the 59 public assistance students gave usable responses. The frequency analysis is shown in Table XX. There is little difference between the two groups of students' attitudes toward professional degree as a level of education their spouse should possess. However, there are greater percentage differences between the two groups at the high school, vocational, and college degree levels. A majority of about 70 per cent of both public and nonpublic assistance students thought the person they would marry should have a college education. Relatively few students in either group wanted to marry a person with a vocational level of education. Larger proportions of the students in both groups preferred a marriage partner with a high school education than a vocational education.

Table XX shows little percentage difference between the attitudes of public and nonpublic assistance mothers on the amount of education their child's spouse should possess at the college and professional degree levels. However, a greater percentage difference exists in their attitudes about the high school or vocational school as the level of education needed. The attitudinal differences between mothers and students of both groups is small (9.3%). The difference in attitudes of nonpublic assistance students and mothers showed almost the same percentage difference (10.4%) as the public assistance students and mothers with regards to high school as a desired level of education. The percentage differences on attitudes toward vocational education as the level of education the student's spouse should possess is very small. On the level of education the spouse should possess, the public assistance students, public assistance mothers, and nonpublic assistance students indicated a vocational level education as the least desired when compared to a high school education. Comparing attitudes toward reaching a professional degree regarding students and their spouses, only about one-third as many respondents desire this for the spouse, as for the student. This is true for both public assistance and nonpublic assistance mothers and students.

Summary of Parent's and Child's Aspirations:

The analysis of students' and parents' aspirations showed no significant differences in attitudes on jobs or on education, when compared by source of income or race. Similar results were found for work attitudes. When the aspiration data were statistically analyzed, significant effects were found on the level of school aspired to and level of academic performance variable at the .05 level. The correlation analysis showed significant correlations between students' aspirations for jobs that they would like to have, the jobs they expected to have, and attitudes toward work.

When the North-Hatt rating of jobs mothers aspired for their children was compared to the students' job aspirations measured on the North-Hatt scale, a substantial number of mothers in both groups aspired jobs for the children that were rated lower than the child's job rating. This high percentage was attributed mainly to the mothers' failure to give a response that could be rated by the North-Hatt scale, signaling the fact that many of the mothers had no specific job in mind for their children, and left the choice entirely to the children.

The data on attitudes of mothers and students of public and nonpublic assistance families as to amount of education the students and their spouses should possess showed very close similarities. The students' responses on college preparation and on courses liked indicated a significant relation to level of academic performance and the source of family income at the .05 level of significance.

The analysis of data on level of education students thought they needed for their aspired job varied slightly between groups. Mothers of public and nonpublic assistance families showed more difference between groups than students on level of education they thought their child would need for the job to which he aspired. About 70 per cent of mothers and students of both public and nonpublic assistance families thought the students needed a college level of education.



TABLE XIX

MOTHERS' PERCEIVED LEVELS OF EDUCATION STUDENTS NEED FOR ASPIRED JOBS

The Perceived Levels of Education Needed

	High	Voca'l	College	Prof'l	T	otal
Group:	School %	School %	%	School %	n	%
Public Assistance	13.0	16.7	40.7	29.6	54	100.0
Nonpublic Assistance	9.8	22.0	46.2	22.0	82	100.0
Total					136	100.0

TABLE XX

STUDENTS' AND MOTHERS' ATTITUDES ON LEVEL OF EDUCATION STUDENTS' SPOUSE SHOULD POSSESS

	Public A	ssistance	Nonpublic Assistan		
Level of Education:	Students n: 56	Mothers n: 55	Students n: 77	Mothers n: 77	
High School Diploma	14.3%	23.6%	2 4.7 %	14.3%	
Vocational Certificate	12.5	7.3	9.1	16.9	
College Degree	66.1	60.0	58.4	57.1	
Professional Degree	7.1	9.1	7.8	11.7	
Total	100.0	100.0	100.0	100.0	

The analysis of the data on attitudes of the amount of education the students' spouse should possess showed close similarities for the students and their mothers for both public and nonpublic assistance groups. The attitudes between students and mothers of public and nonpublic assistance groups showed almost identical percentage differences (9.3% and 10.4%) in their belief that high school was a suitable level of education for the students' spouse. About 70 per cent of students and parents of both groups thought the student's spouse should have a college degree, but fewer believed that the professional level of education was required.

The data on aspirations of students and their mothers were quite similar. The attitudes with respect to the amount of education the student would need for the aspired job did not differ appreciably. Nor did students and mothers differ appreciably on the amount of education they regarded as needed by the student's future spouse. It is therefore concluded that the third hypothesis is tenable.



SECTION 5. REVIEW AND RECOMMENDATIONS

5.1 Research Procedures

We have been concerned with factors associated with the academic performance of children of high school age coming from public assistance families. Specifically, we have sought to answer three questions. First, does the source of family income in and of itself affect academic performance. Second, how do parental aspirations for the child's academic achievement in terms of going to college relate to the child's academic aspirations for himself? Third, what are the effects of family role evaluation on the academic performance of the student? To answer these questions, we have taken a group of low-income students attending school on a given day in all of the six Logan County high schools. Of about 400 parents providing information on family income, 145 fell in the low-income category of \$4,000 or less per annum. Thus, 36 per cent of the responding families were in the low-income category. About 40 per cent of the low-income group came from families receiving public assistance. However this figure underrepresents the public assistance families, because the school absentee rate from such families was 25 per cent, compared with an absentee rate for the rest of the school population of less than 10 per cent. Revising to correct for this discrepancy gives a figure of about 45 per cent of the low income families, and nearly 20 per cent of all responding families falling in the public assistance category. The comparisons include 85 low-income families not on public assistance, and 60 families receiving public assistance.

Other researchers concerned with questions related to the performance of students from low-income families have found that level of income is associated with academic performance, and that the lower income levels also reflect lower levels of interest and aspiration. It has been shown that parental attitudes exert an influence on the children regarding aspirations for academic achievement, and for vocational aspirations. Fathers, if present, exert a somewhat stronger influence on boys' vocational orientations, but the mothers also exert a measurable influence on the boys, as well as the girls. These effects may also be seen if the parents' attitudes to education are negative, or if the parents' own level of educational attainment was low. The parents are an important influence. The children are well aware of their parents' attitudes and values, and if the parents are receptive, the children of high school age will turn to them for advice. The effect is especially noticable if the parents encourage academic achievement in their children. If parents encourage high vocational aspirations or specific aspirations, the effect is to stimulate interest in academic achievement. Such attitudes are not prevalent in the lower income strata however. Even though stated educational aspirations of students may appear high, students from the lower income strata are not likely to make realistic plans or preparations for educational and vocational opportunities. This effect is more pronounced in rural areas than in urban and industrial areas. Students in low income areas, and in impoverished rural areas are especially vulnerable to low interest levels, and to low self-evaluations which leads to frustration and detachment in the later school years. They see little point in striving in school, and tend to have only nebulous, and often impractical ideas as to what they want to do after leaving school. In general, the social status and standards of the family are reflected in the attitudes and performance of their children in the student role.

This study was a part of a larger research project, the Logan County Youth Study, conducted by Langston University with the cooperation of Oklahoma State University. The Logan County Study is a three-phase project which was funded through the United States Department of Cooperative State Research Services under grant number 716-15-35.

We have focused on students and mothers of the families whose annual income was derived from public or nonpublic sources which amounted to \$4,000.00 or less. The categorizing of the student and mother as public assistance or nonpublic assistance was accomplished through two approaches. The first approach was to ask the mother to indicate the amount and source of income as welfare or other. The public records of the Logan County Office of Institutional, Social and Rehabilitative Services (County Welfare) were used to establish valid identity of those students and mothers who were categorized as receiving public assistance.

The design of this study was a quasi-experimental design of a static group comparison type, consisting of a single treatment group. The students and mothers who receive public welfare funds constituted the treatment group. Students enrolled in the tenth, eleventh, and twelfth grades were included in the study. A total of 85 nonpublic assistance students and their mothers and 60 public assistance students and their mothers were included in this study. The students attended one of five high schools in Logan County.

The instruments used in this study were a student questionnaire and a questionnaire designed for the mother. The student questionnaire was constructed so that data were obtained on (1) perceived levels of academic



performance; (2) concepts of academic ability; (3) role evaluation of family relationships; and (4) attitudes on education and aspiration.

The mother's questionnaire was constructed so that the data on aspired level of education, occupational aspirations, attitudes on education, and family role evaluation of relationships were obtained.

It was believed that this data might provide a basis for determining if students of families who were receiving public assistance and nonpublic assistance are significantly different in their levels of academic performance, though the students were from the same income strata, and that the analysis of the family role evaluation of relationships may reveal some insight into their effects on level of education aspired and levels of academic performance. The results, if positive, would point to the need for utilizing the family as a mechanism to improve aspirations and levels of academic performance of students of the same income strata. Finally, the study could provide some insight into the importance of parents and students holding similar attitudes toward education.

All students attending school in the tenth, eleventh, and twelfth grades in Logan County were administered an extended questionnaire which elicited their evaluations of themselves as students, as family members and as workers. The student's evaluation of his parents, and his beliefs about the parents' evaluation of him were included. Vocational and educational plans were included, together with several items to indicate the student's familiarity with universities and vocational schooling opportunities. The parents were sent a shorter questionnaire with similar items. In the present sample, only the mothers' questionnaires were considered because most of the public assistance families had no father available. Sets of items were developed which could permit aggregating a score relative to specific student adjustments, and nearly all items were organized on a continuum for ordinal scoring. The authors performed the computer programming and the data was machine processed. The bulk of the statistical analysis involved ranks tests, such as the Mann-Whitney, and the Kruskal-Wallis tests. Chi-square tests were used where applicable, and correlations were calculated on a total of nineteen scored items reflecting family orientations. Those relevant to the hypotheses are discussed here. The conclusions are limited and tenuous because a simple static comparison is made, and the arguments are confined entirely to ex post facto elements. Parents' questionnaires were mailed so that they would arrive by a channel independent of the student, and an envelope was provided for their return to the school via the student, for special credit, and an incentive of fifty cents per questionnaire returned was provided. Returns were secured from 52 per cent of the parents.

5.2 Findings

Public assistance students receive signicantly lower grades than non-public-assistance students. About 70 per cent of each group indicate accurate perception of their level of academic performance. Only one of the sixty public assistance students had an "A" average, while five of the comparison group performed at this level. In spite of the difference in performance, the two groups did not differ significantly on their perception of their own abilities or on the amount of confidence of success in post-high-school adjustment. Nor did the two groups differ in evaluating their degree of conformity. In both groups, the level of aspiration is significantly related to ratings on conformity. The high aspirers conform significantly more to parental expectations.

In the evaluation of six aspects of family role evaluation, rating on discipline is significantly affected by source of income, and race. Rating on the love dimension indicated significant effects for race difference, but not for source of income. Scoring on parental activity, parental help, mother-child ratings, and mood ratings indicated no statistically significant differences by source of income or by race. Grade in school has no effect on these ratings, but aspiration level is strongly affected by parental activity, parental help, and the rating of discipline. Aspiration level is not affected by rating of love, mother-child rating, or by mood rating. Academic performance is definitely affected both by the degree of shared activity with parents, and by the amount of help which parents give to their children. The children are, apparently, quite responsive in these developmental areas to the degree of interest and involvement of the parents. This would again lead us to anticipate lower performance levels in families which are deprived of one of the parents, at least for an aggregate group. There are several significant correlations between family-role ratings. Parental help correlates positively with shared activity, suggesting that shared routines of family living are conducive to parental involvement and help regarding the high school child's problems. Findings previously discussed indicate that this involvement leads to higher performance and aspiration levels. The level of parental help is also positively correlated with the mutual child-parent ratings. Mood levels are similarly related to the child-parent ratings, and to the ratings for discipline.

Health and dietary factors are not affected by source of income insofar as our measures indicate. Race difference does produce significant differences in the variety of foods consumed in the twenty-four hour period preceding administration of the questionnaire, and significant differences in the number of foods liked. This variable



also produces a difference in health ratings. Significant differences were not found among the three grades in school, which suggests that realignment toward dietary and health concepts is not a part of the high school maturational process. But aspiration levels are significantly affected by the number of foods liked, and by the health rating. Performance levels are also positively related to food likes. We believe that the more positively adjusted child has a more accepting orientation toward food, and that acceptance and liking of a broad range of foods is symptomatic of a more positive and more successful adjustment. Correlations of ratings among the dietary scores indicate a positive relation between the number of family meals eaten together and the number of foods liked, and with self-ratings of health. Similarly, health ratings and food likes are strongly related. The index of dietary adequacy, however, correlates significantly only with the health rating. Adequacy of food, together with food attitudes appear to have a direct bearing on the effectiveness of the high school child as a student, and as a family member. We would therefore infer that these factors will exert considerable indirect effect on academic performance, and on vocational development.

The level of the job which the student prefers ten years in the future has a significant effect on his level of performance in high school. If he has a definite level of vocational aspiration, he apparently has a better basis for motivation, orientation, and course selection. The mothers' aspiration levels regarding the vocational choice of the children were low, and in the majority of cases, undefined. We believe that the maternal disorientation toward the child's vocational future may be a significant factor in the loose orientation of the students in the low-income group. This is not to argue that the mother could well dictate what the child should select, but rather, that articulation by the mother would afford the child a logical basis for incorporating this problem into his thinking. Grade in school had a significant relation to course likes, and the degree of preparation for college was also related to course likes. The implication is that preparation and orientation for further schooling beyond high school has the effect of generating and sustaining interest in academic work at the college level. About 70 per cent of both the public assistance and the non-public-assistance groups believed that college would be needed for job qualification, though less than half were performing at a level which would give them a reasonable chance either of being admitted or of succeeding in college work.

These findings permit answers to the three research questions posed at the beginning of this section. Regarding the first question, in terms of actual academic performance according to recorded grades for the two regular school terms preceding administration of the questionnaire, students from public assistance families performed significantly lower than students in the same income bracket coming from families which were not receiving public assistance. Source of income does affect academic performance. On the second question, as to the relation of the mother's aspirations for her child's further academic training and the child's own aspiration for himself, there is no difference by source of income between the parents and the children. About 70 per cent of mothers and 70 per cent of children in both income groups indicate college as the proper and desired goal. But no adequate preparations academic or otherwise are being made for most of the low-income students. The goal is recognized on the idealistic but not on the practical level. On the third question, the quality of family role relations has a distinct bearing on the orientation and adjustment of the high school child to his course selections, and to his standards of performance. Active and positive intra-family relations exert a favorable effect on the student's performance, his preparation for the future, and his orientation toward school.

5.3 Recommendations

We are confident that generalization of these recommendations to the population of students and mothers of public and nonpublic assistance families of \$4,000.00 or less is justified, provided the recommendations are generalized only to relatively similar areas of the rural poor.

Several recommendations may be made based on the findings of this study:

- 1. Means should be sought to increase the involvement of parents in many activities and decision-making situations involving their children. Parents should offer constructive help for solving students' problems. The study revealed that such family roles seemed to stimulate high levels of educational aspirations and greatly influenced achievement of higher levels of academic performance.
- 2. The schools should attempt to develop programs which will influence the parent's interests in the future occupation and education of the child. The study showed evidences that a majority of the mothers aspired jobs that had lower aspiration scores than those aspired by the students. It was also shown that a substantial number of the mothers were not adequately expressing any specific aspiration concern for their child's future occupation.
- 3. School officials and welfare specialists should work jointly on ways and means of counseling students and mothers of public assistance families in order to develop an understanding of what may be needed to develop



similarities of students and their parents with respect to their attitudes with regard to education. The findings of similarities of the mother and child's attitudes on education support the researcher's belief that such reciprocal relationships between public school and governmental agencies might be desirable.

4. Additional research should be done in this area which will investigate in greater depth the difference in academic performance of students of public and nonpublic assistance families. Such factors as intelligence, race, achievement, and aptitude should be considered as worthy of investigation in depth.

ERIC

REFERENCES

- Anderson, Robert C., et. al. "Parental Aspirations: A Key to the Educational and Occupational Achievement of Youth," Adult Leadership, XIV (May, 1965), 8-10.
- Report No. 122. Washington: Government Printing Office, 1967.
- Bell, Gerald D. "Processes in the Formation of Adolescents' Aspirations," Social Forces, XLII (December, 1963), 179-185.
- Beegle, J. A. and R. Rice. "Some Demographic Characteristics of Rural Youth," in <u>Rural Youth in Crisis</u>: <u>Facts</u>, <u>Myths and Social Change</u>, ed. Lee G. Buchinal. Washington: Government Printing Office, 1965.
- Berger, E. M. "Willingness to Accept Limitations and College Achievement," <u>Journal of Counseling Psychology</u>, VIII (Summer, 1961), 140-146.
- Bishop, Carol, et. al. <u>Vocational and Educational Goals of Rural Youth in Virginia</u>. Bulletin No. 568. Blacksburg, Virginia: the Experiment Station, 1965.
- Borg, Walter R. Educational Research. New York: David McKay Company, Inc., 1963.
- Brodua, J. D. "Educational Aspirations and Parental Stress on College," <u>Social Forces</u>, XXXVIII (March, 1960), 262-269.
- Brunkan, Richard J. "Perceived Parental Attitudes and Parental Identification in Relation to Field of Vocational Choice," Journal of Counseling Psychology, XII (Spring, 1965), 39-47.
- Burchinal, Lee G. "Differences In Educational and Occupational Aspirations of Farm, Small Town, and City Boys," Rural Sociology, XXVI (June, 1961), 107-121.
- Buck, Roy E. "The Role of Vocational Agriculture in Social and Economic Development of Rural Youth," Agricultural Education Magazine, XXXVI (October, 1962), 43.
- Burgess, Elaine M. and Danuel O. Price. An American Dependency Challenge. Chicago: University of Chicago Press, 1963.
- Carter, H. D. "Improving the Prediction of School Achievements," Educational Administration and Supervision, XLV (September, 1959), 255-260.
- Campbell, Donald T. and Julian C. Stanley. "Experimental and Quasi-Experimental Designs for Research on Teaching," <u>Handbook of Research on Teaching</u>, ed. N. L. Gage. Chicago: Rand McNally and Company, 1963.
- Curry, R. L. "The Effects of Socioeconomic Status on the Scholastic Achievement of Sixty Grade Students," <u>British Journal of Educational Psychology</u>, XXXII (December, 1962), 46-49.
- Davis, Allison. "Socialization and Adolescence Personality," Readings in Social Psychology, eds. Theodore M. Newcomb and Eugene Hartley. New York: Harvard University Press, 1947, Chapter III, 139-150.
- Davis, Helen H., and Gerhard Lang, "Children's Perception of Their Teacher's Feeling Toward Them as Related to Self-Perception, School-achievement and Behavior," <u>Journal of Experimental Education</u> LVI (November, 1960), pp. 110-116.



- Edwards, Allen L., Statistical Analysis For Students in Psychology and Education, New York, Rinehart and Company, 1946.
- Ellis, Robert A. and W. Clayton Land. "Structural Supports for Upward Mobility," <u>American Sociological Review</u>, XXVIII (October, 1963), 743-756.
- Ferguson, George A. Statistical Analysis in Psychology and Education. New York: McGraw Hill Book Company, 1966.
- Finger, J. A. and S. E. Schlesser. "Non-intellectual Predictors of Academic Success in School and College," <u>School Review</u>, LXXIII (Spring, 1965), 14-29.
- Fink, Martin B. "Self-Concept as Related to Academic Underachievement," California Journal of Educational Research, LVIII (May, 1965), 409-411.
- Grinder, Robert E. "Relations of Social Dating Attractions to Academic Orientation and Peer Relations," <u>Journal of Educational Psychology</u>, LVII (February, 1966), 27-34.
- Hallenbeck, George P. "Condition and Outcomes in the Student-Parent Relationship," <u>Journal of Counseling Psychology</u>, XII (May, 1965), 237-241.
- Haller, A. O. and C. E. Butterworth. "Peer Influence on the Role of Occupational and Educational Aspirations," Social Forces, XXXVIII (May, 1960), 289-295.
- Hatt, P. K., and C. C. North, "Jobs and Occupations: A Popular Evaluation," Opinion News, September, 1947.
- Heath, B. R. and Wray Strowig. "Predicting Occupational Status for Non-College-Bound Males," Personnel and Guidance Journal, XLVI, No. 2 (October, 1967), 144-149.
- Hillard, Raymond M. "New Techniques in the Rehabilitation of Welfare Dependents," <u>Poverty in America</u>, ed. Margaret S. Gordon. San Francisco: Institute of Industrial Relations, 1965, 267-277.
- Holloway, Robert and J. V. Berreman. "The Educational and Occupational Aspirations and Plans of Negro and White Male Elementary School Students," <u>Pacific Sociological Review</u>, II (Fall, 1959), 56-60.
- Irelan, Lola M. Low Income Life Styles. Washington: U. S. Printing Office, 1966.
- Jaffe, A. J. J., Walter Adams, and Sandra G. Meyers. "The Sharply Stratified World of the Negro Colleges," College Board Review, LXVI (Winter, 1967-68), 20-28.
- Kadushin, Alfred. Child Welfare. New York: The Macmillan Company, 1967.
- Kahl, Joseph A. "Educational and Occupational Aspirations of Common Man's Boys," <u>Harvard Educational Review</u>, XXIII (Summer, 1953), 183-203.
- Kemp, Barbara H. The Youth We Haven't Served. Washington: Government Printing Press, 1966.
- Kerlinger, Fred N. Foundations of Behavioral Research. New York: Holt, Rinehart and Winston, Inc., 1966.
- Kevlesky, William P. and Robert C. Bealer. "Classification of the Concept Occupational Choice," <u>Rural Sociology</u>, XXXI (September, 1966), 265-276.



ERIC

- Kirkendall, Lester and Ben Ard. "The Family, Education and Child Adjustments," Review of Educational Research, XXII (February, 1952), 51-58.
- Kvaraceus, William C., et. al. Negro Self-Concept. New York: McGraw Hill, 1965.
- Larkin, Philip E. "Parent-Child Similarities in Personality Disturbances," <u>Journal of Clinical Psychology</u>, VII (January, 1951), 188-190.
- Lanning, Frank and Russel Robbins. "Children in Trouble: Gifted Underachievers," The Instructor, LXXVIII (May, 1968), 133.
- Levine, Daniel V. "How Pupil Socioeconomic Class Affects Educators," Phi Delta Kappan, XLVIII (March, 1967), 367.
- Lipset, S. M. and Richard Bendix. Social Mobility in Industrial ety. Berkeley: University of California Press, 1962.
- Logan County Technical Action Panel. Overall Economic Development Plan for Logan County. Guthrie: the Panel, 1967.
- Medsker, Leland L. and James W. Tyent. The Influences of Public Higher Institutions on College Attendance from Varying Socioeconomic and Ability Levels. Berkeley: University of California Press, 1965.
- Miller, Delbert C. Handbook of Research Design and Social Measurement. New York: David McKay Company, Inc., 1967.
- Miller, Herman P. and Dorothy K. Newman. Social and Economic Conditions of Negroes in the United States.

 United States Department of Labor. Publication No. 332. Washington: Government Printing Office, 1967.
- Mitchum, John C. and Anna M. Mitchum. "Minority Child," The Instructor, LXXVII (April, 1958), 63.
- Mukhtar, Malik A. "The School Performance of Children in Families Receiving Public Assistance in Canada." Unpublished paper, Canadian Welfare Council, Toronto, 1966.
- Oklahoma State Department of Education. A New Concept in Vocational-Technical Education in Oklahoma. Stillwater, Oklahoma: State Board for Vocational Education, 1966.
- Ozack, Louis H. "Occupational Impressions, Occupational Preferences, and Residence," <u>Personnel and Guidance Journal</u>, XXXVIII (January, 1960) 359-363.
- Passow, Harry A. <u>Nurturing Individual Potentials</u>. Washington: Association for Supervision and Curriculum Development, 1964.
- Riessman, Frank. The Culturally Deprived Child. New York: Harper and Row, 1962.
- Rosen, Bernard C. "The Reference Group Approach to the Parental Factors in Attitudes and Behavior Formation," Social Forces, XXXIV (December, 1955), 137-144.
- Sears, Pauline S. "Level of Aspiration in Academically Successful and Unsuccessful Children," <u>Journal of Abnormal Psychology</u>, XXXV (January, 1940), 498-536.
- Sewell, William H. "Community of Residence and College Plans," American Sociological Review, XXIX (February, 1964), 24-38.



- Sewell, William H., A. O. Haller, and Murray H. Straus, "Social Status and Educational and Occupational Aspirations," <u>American Sociological Review</u>, XXII (February, 1957), 67-73.
- Sexton, Patricia. Education and Income. New York: Viking Press, 1961.
- Share, Milton F. and Allan H. Lieman. "Parental Perceptions of the Student as Pelated to Academic Achievement in Junior College," The Journal of Experimental Education, XXXIII (Summer, 1965), 391-394.
- Shaw, M. C. "Parent Attitudes Toward Independent Training and Academic Achievement of Their Children," <u>Journal of Educational Psychology</u>, LV (December, 1964), 371-374.
- Siegel, Sidney. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill Book Company, Inc., 1956.
- _____ "Level of Aspiration and Decision Making," <u>Psychological Review</u>, LXIV (January, 1967), 253-262.
- Simpson, R. L. "Parental Influence, Anticipatory Sociolization and Social Mobility," <u>American Sociological Review</u>, XXVII (August, 1962), 517-522.
- Tuel, J. K. and R. Wursten. "Influences of Intra-Personal Variables on Academic Achievement," California Journal of Research, XVI (March, 1965), 58-64.
- Turner, Ralph H. The Social Context of Ambitions. San Francisco: Chandler Publishing Company, 1964.
- Tweeten, Luther G. Rural Poverty: Incidence, Cause, and Cures. Stillwater: Oklahoma State University, 1968.
- U. S. Department of Agriculture, Economic Development Division, Rural People in the American Economy, Washington, D.C., 1966.
- U. S. Department of Health, Education and Welfare. Economic Development Division. Rural People in the American Economy. Washington: Government Printing Office, 1966.
- Walker, Helen M. and Joseph Lev. Elementary Statistical Methods. New York: Holt, Rinehart and Winston, Inc., 1958.



APPENDIX A

CAREER PLANS OF HIGH SCHOOL YOUTH
LOGAN COUNTY YOUTH STUDY
1968

CAREER PLANS OF HIGH SCHOOL YOUTH

CD1 1-4 5

ERIC

*Full Tax Provided by ERIC

As a high school student you have been concerned about preparing for your career and your future. Your family is also interested in what you will do. The following questions seek to determine what you consider important in making plans for what you will do when you leave high school. This information will be used by a research group from Langston and Oklahoma State Universities to better assist educators and high school students in fulfilling their career plans.

Please answer each question as accurately and as promptly as possible. The information that you give will be used exclusively for research purposes and will not be connected with your name.

Thank you for your assistance in this research.

Logan County Youth Study

	NAME (Print)	
	First Lest	
	STREET ADDRESS OR ROUTE	
	City State	Zip Code
	MOTHER OR STEPMOTHER (Print)	
	FATHER OR STEPFATHER (Print)	
	HIGH SCHOOLJUNIOR HIGH	
6	SEX .1 Male2 Female	
* ₇	GRADE .1 10th .2 11th .3 12th	
8	AGE LAST BIRTHDAY .1 152 163 174 1	85 over 18
* 9	WHICH DESCRIBES YOU? .1 Indian .2 Oriental .	3 Negro4 White
10	WHERE DO YOU LIVE? .1 On Farm .2 Country, but not .3 Town under 1000 .4 Town of 1000-2500 .5	Farm Town over 2500
11-12	MARK X ON THE GRADE NEAREST YOUR AVERAGE FOR THE LAST .1 A .2 A3 B+ .4 B .5 B6 C+ .7 C	TWO SEMESTERS: .8 C9 D .10 F
13-15	15 IN WHAT SUBJECTS DO YOU GET THE BEST GRADES? .1	
	.23	.4
16-18	-18 IN WHAT SUBJECTS DO YOU GET YOUR POOREST GRADES? .1	
	.23	4
19		
20 21	.2 Dislike 0 1 2 3 4 5 6 7	
Items	ms used in the production of this monograph.	

CD1	IN GENERAL, HOW WOULD YOU RATE YOURSEL			
			IR AVERAGE	
* 22	.1 Reading	(1)	2) (3)	(4) (5)
23	.2 Writing		_	
*24	.3 Public Speaking			
₩ 25	.4 Use of Library			
₩26	.5 Preparation of Assignments			
₩27	.6 Taking Essay Tests			
*28	.7 Taking Multiple Choice Tests			
₩29	.8 Extra Curricular Activities			
*30	.9 Attendance			
*31	.10 Athletics			
	10 itelizetation and the second			
* 32 - 34	CONSIDERING YOUR REAL ABILITIES AS A ST DESCRIBES THE HIGHEST TRAINING LEVEL PLAN TO ATTAIN, AND (3) YOU WOULD LIE	(1) YOU ARE CAP		
		CAPABLE OF	PLAN TO	WOULD LIKE
		ATTAINING	ATTAIN	TO ATTAIN
	PH.D. or Profession	1	1	.1
	Engineering Degree	2	2345	2
	Teaching Certificate	3 4 5 6 7	3	3
	College Degree	4	4	4
	Vocational School Certificate	5	5	5
	Business School	6	6	i6
	Graduate from High School	.7	7	7
	Get a Job	.8	.8	.8
	Work on Farm	9	.9	3 4 5 5 6 7 8
35-36	PLEASE MARK ALL SOURCES OF INFORMATION THE FUTURE.		MAKING YOUR	
	.1 Mother	.7 Friends		
	.2 Father	.8 Books	-	
	.3 Teachers	.9 Magazines		
	.4 Counselor	.10 Televisi	on	
	.5 Minister .6 Other Adults	.11 Movies		
	.6 Other Adults	.12 Travel or		
		Tours		
37-42	WHICH HELPFUL SOURCES OF INFORMATION HAV	VE BEEN MOST HELP	FUL TO YOU?	
	.13	.4		.5
* 43	HOW SURE ARE YOU ABOUT SUCCEEDING IN YOU Very Sure Fairly Sure .2	Somewhat Doubtfo	ul Very	Doubtful
44 45	HOW MANY TIMES HAVE YOU BEEN ON A SCHOOL 1 College O 1 2 3 4 2 Vocational School O 1 2 3 4	DL CAMPUS? (MARK X 5 6 7 8 9 10 5 6 7 8 9 10	THROUGH ANSW O or more O or more	JER)
46	HOW MANY COLLEGE AND VOCATIONAL SCHOOL YOUR HIGH SCHOOL LIBRARY? .1 1 2 3 4 5 6 7 8 9 10 c .2 None Available in Library	or more	ES HAVE YOU E	XAMINED IN

O.)1	IN OKLAHOMA WHICH YOU CO					MF2	AND	COLLEGE	S DO 100 1	THINK THERE	AKE
	47	.1 Universities	0	2	5	10	15	20	50			
	48	.2 Junior Colleges	0	2	5	10	15	20	50			
	49	.2 Junior Colleges .3 Vocational Schools	0	2	5	10	15	20	50			
			_	_	_							
	50	INDICATE THE STEPS REQUIRE SCHOOL, COLLEGE, OR UNIV				ADMIT	TED	TO A	A DEGREE	GRANTING .	VOCATIONAL	
		Apply by Apply in Send	Sc	hoo	1	Pass	Ent	ranc	e Pay	Be Gradu	iate	
		Mail Person Rec	ord	ls		Exami	nati	lons	Fees	Of High S	School	
		Mail Person Reco.13_				.4_		_	.5	.6		
. م												
3	1-60	LIST THE FAMILY MEMBERS WIT	ľH	WHO	M Y							
		.1 Mother		-			.6	Ste	pfather			
		.2 Father		_			.7	Gra	ndmother			
		.3 Sister(s)		-			.8	Gra	ndfather			
		.4 Brother(s)		_			.9	Oth	er Femal	e Relative		
		.1 Mother .2 Father .3 Sister(s) .4 Brother(s) .5 Stepmother		-			.10	Oth	er Male	Relative		
		THE WORDS MOTHER AND FATHER IF APPROPRIATE.										
* 61	-64	PLEASE INDICATE THOSE ACTI MOTHER AND/OR YOUR FATHE		CLES	II.		FOL:		NG LIST	WHICH YOU FATHI		R
		Eat Meals at Home)THE					
		Have Confidential Talks				•	<u></u>	-		· 2	-	
		Play Games					<u></u>	-		.6		
		Social Events					,—	-		.4 .6 .8 .10 .12		
		Go to Movies						-		.10		
		Church Activities				.1		-		.12		
		Watch Television				.13	3	_		. 14		
		Do Housework				.15		_		.16		
		Do Yardwork				.17		_		.18		
		Do Chores				.19		_		.20	····	
		Help Parents in Occupation				. 21		_		.22		
		IN THE FOLLOWING KINDS OF PR	ORT	EMS	: 1	IOM MOI	юн і	HET.P	ווסץ סמ	GET FROM S	OUR PARENTS	37
		Zii Iiii I dandii and manad da an		(1		(2)		(3)		4)	(5)	
		HELP WITH MONEY PROBLEMS?		Non		À	A۱	vera	ge Con	siderable	A Great	
					I	Little	e Ar	noun	t	Amount	Dea1	
*	65	.1 Mother					-		,		-	•
(66	.2 Father			-				1	-	*********	
		HELP WITH PERSONAL PROBLEM	S?									
	67	.1 Mother					•		•			
(68	.2 Father			_		•		•			
* '	. ^	HELP WITH SCHOOL PROBLEMS?										
	69 70	.1 Mother .2 Father			_		•					
•	70	HELP IN MAKING DECISIONS?					•		•	-	-	
*	71	.1 Mother						•				
	72	.2 Father		-	-		•		•			
•	-	HELP WHEN YOU ARE IN TROUB	ĽE?	-			•		•			
*	73	.1 Mother										
	74	.2 Father			_		•					
					_	-	•		•			

	CD1	HELPFUL ADVICE?		None		A Little	Considera Amount	Deal
	CD2			(1)		(2)	(3)	(4)
×	75 6	.1 Mother .2 Father		********				
		WHICH OF THE FOLLOW	ING BEST DE	ESCRIBES	YOUR LOV	VE FOR YOUR	PARENTS?	
		Weal		/ery Str (2)	ong :	Strong (3)	Very Strong (4)	Unlimited (5)
×	7	.1 Mother			_			
	8	.2 Father	-		-	- 		
×	•	HOW MUCH LOVE DO YOU .1 Mother	J THINK YOU	IR PARE	TS HAVE I	FOR YOU?		
	9 10	.2 Father			•			
			•	Poor	Below Average	Average	Good .	Excellent
		HOW DO YOU RATE YOU	R PARENTS?	(1)	(2)	(3)	(4)	(5)
×	11	.1 Mother						
	12	.2 Father						
*	13	HOW WOULD YOUR HOTH						
•	14	.2 You as a child	ier				-	
	14							
		HOW WOULD YOUR FATH						
	15 16	.1 Himself as a fath	ner				-	*****
	10	.2 Iou as a chille				********		***********
		HOW WOULD YOU RATE	YOURSELF:					
×	17	.1 As a child to you						
	18	.2 As a child to you	ur father					
		HOW OFTEN ARE YOUR	PARENTS IN Never	A GOOD Rarely	MOOD? Half 8	tuale i	Jsu ally A l	.ways
			(1)	(2)			(4)	(5)
X	19	.1 Mother	\- /	\- /	(5)	,	(")	(-)
	20	.2 Father				-		
	L	AT HOME HOW OFTEN A	RE YOU IN A	GOOD N	100D TOWAL	RD YOUR PAI	RENTS?	
7	21	.1 Towards Mother		-				
	22	.2 Towards Father		-				
		IF YOU DO SOMETHING	YOUR PAREN	T CONS	IDERS WRO	NG, HOW DOE	S HE REACT?	Very
			Reaction	Mild	•	Moderately	Strongly	Strongly
¥	23	.1 Mother	(1)	(2	:)	(3)	(4)	(5)
	24	.2 Father	-		-			-
	v				_			
		IF YOU DO SOMETHING Do	SERIOUSLY.	WRONG,	HOW DOES	YOUR PARES	T PUNISH YOU? Reduce	
		Nothing	g Sulk	s se	old I	Restrict	Allowance	Slap or Hit
		(1)	(2)		(3)	(4)	(5)	(6)
X	25	.1 Mother						
	26	.2 Father		_ •				

CD2	WHEN YOU DO SOMETHING Critical (1)	VERY WELL, Indifferen		ed Comp	REACT? olimentary (4)	Enth (:	siastic
* 27	.1 Mother			_			
28	.2 Father			•		- 300	-
	IF YOU DO SOMETHING V	•	OW DOES YOU	Gran	it G	ift or	Care ss
	Reward (1)	Compliment (2)	Praise (3)	Privi1 (4)		Money (5)	or Pat
* 29	.1 Mother	(2)	(3)	(4)		(2)	(6)
30	.2 Father						
* 31	HOW OFTEN DO YOU BEHA	VE AS	Never	Rarely	Sometime	s Most	:ly Always
31	YOUR PARENTS THINK		(1)	(2)	(3)	(4)	
						-	
* 32	HOW OFTEN DO YOUR PAR AS THEY SHOULD? M	ENTS BEHAVE other					
33		ather			*******	*****	
34	HOW OFTEN DO YOUR PAR	ENTS					•
	AGREE ON FAMILY PRO	BLEMS?					
* 35 - 36	IF YOU HAD THE ABILIT			, what kin	ID OF WORK	WOULD YOU	J REALLY
* 37	HOW MUCH EDUCATION DO			EED FOR TH			rofessional School
Man an	NOW CONSIDERING YOUR	AGRIST ABTT	TOTEC COAD	ec pinanc	PE AND CH	ANCRE FA	
*38-39	EDUCATION, WHAT KIN FROM NOW? BE VERY	ID OF WORK D	O YOU ACTUA NAME THE JO	LLY EXPECT B.	TO BE DOD	ng ten yi	EARS
*							
≁ 40	HOW MUCH EDUCATION DO .1 High .2 Bus School Sc		YOU WILL NE 3 Vocations School		S? College	.5 Pı	ofessions1 School

41-42	AT WHAT AGE DID YOU I 12 or Less 13 14	DECIDE ON THE		XPECT TO H	AVE?		
43-44	AT WHAT AGE DO YOU EX 16 or 17 18 19)	
* ₄₅	HOW MUCH EDUCATION DO .1 High .2 Bu School		THE PERSON 3 Vocationa School		SHOULD HAV	.5 Pro	ofessional School
					********	_	

ERIC Full text Provided by ERIC

CD2		Completely Dissetisfied	Somewhat Dissatisfied	Accept It	Fairly Satisfied	Fully Satisfied
¥ 46	HOW DO YOU FEEL ABOUT YOUR CHOICE OF OCCUPATION?	(1)	(2)	(3)	(4)	(5)
	HOW DO YOUR PARENTS FEEL A	BOUT				
	YOUR CHOICE OF OCCUPATION?					
* 47	.1 Mother					
48	.2 Father					-
	HOW DOES YOUR FATHER FEEL AB	OUT				
	HIS WORK AND SALARY?					
49	.1 Work					
50	.2 Salary				*********	
	HOW DO YOU FEEL ABOUT YOUR					
	FATHER'S WORK AND SALARY?					
51	.1 Work					
52	.2 Salary	**********				
	HOW DOES YOUR MOTHER FEEL AB	OUT				
	FATHER'S WORK AND SALARY?					
53	.1 Work	-		-		
54	.2 Salary	-	-	*****	-	
	IF MOTHER WORKS, HOW DOES SH FEEL ABOUT HER WORK AND SAL					
55	.1 Work					
56	.2 Salary		-			
* 57	LIST THE TYPES OF WORK YOU H	AVE DONE FOR PA	Y1			
	.23		4 Never wo	rked for	: pay	
* 58	LIST THE TYPES OF WORK FOR W	HICH YOU HAVE S	OME TRAINING.	.1		
	.23		.4			
* 59	WHEN YOU WORK HOW DO YOU FEE					
•	.1 Won't .2 Hate to .3 Pre		on't mind .5 l Work		6 Happ to Wo	•
	Work Work to	WOIK	WOLK	WOLK	EO WC	ork.
	- Carrier				-	
* 60	HOW GOOD A WORKER ARE YOU? .1 Poor2 Below Avera	.3 Aye	erage4	Good	5 Exce	llent
61-63	WHAT DO YOU USUALLY DO WITH	YOUR SPARE TIME	.1			
	.2					
	MY PLANS AFTER LEAVING HIGH	SCHOOL: .1 Sta	y .2 Stay	y a Few	.3 Leave	: :elv
64	.1 Staying in Logan County		_			_
65	.2 Staying in Oklahoma					-
66-67	HOW OLD WERE YOU WHEN YOUR F			18 19		

ERIC Arul Text Provided by ERIC

CD2	(MARK AN X THROUGH YOUR ANSWER)										
	High School College Post-Graduate										
8-69	High School College Post-Graduate .1 Mother 1 2 3 4 5 5 7 8 9 10 11 12 13 14 15 16 17 18 19 20										
0-71	.2 Father 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20										
	HOW MUCH MONEY DO YOU EXPECT YOU WOULD ACTUALLY BE ABLE TO EARN PER WEEK UNDER										
	THE FOLLOWING CONDITIONS? (1) (2) (3) (4) (5))									
	THE FOLLOWING CONDITIONS? (1) (2) (3) (4) (5) \$50 \$75 \$100 \$125 \$15										
72	.1 Took permanent job before finishing high school	_									
73	.2 Took permanent job after finishing high school	_									
74	.3 Completed Vocational School	_									
75	.4 Completed college										
CD3	PLEASE INDICATE THE ABILITY OF YOUR FAMILY TO HELP YOU ATTEND COLLEGE OR										
6	VOCATIONAL SCHOOL: .1 Unable to help .2 Small Amount of Help										
	.3 Could give considerable help .4 Could give whatever help is needed										
	The second secon										
7	IN ORDER TO ATTEND COLLEGE OR VOCATIONAL SCHOOL, IF NECESSARY, I WOULD BE										
•	WILLING TO WORK: .1 Part Time .2 Half Time .3 During Summer Vacation										
	Only .4 At No Time										
	HOLL SELECT MANUFEL DO MANUFELLE A COMPRISE CAN DARK DED 1808/ LETTE HORMANG DARK										
8	HOW MUCH MONEY DO YOU THINK A STUDENT CAN EARN PER WEEK WHILE WORKING PART TIME ON THE SCHOOL CAMPUS IF HE TAKES A FULL COURSE LOAD?										
	\$10 \$20 \$30 \$40 Over \$40										
	410 410 430 430 440 6401_ 440										
9	HOW MUCH MONEY DO YOU THINK A STUDENT CAN EARN PER WEEK WITH A PART-TIME JOB										
	AT HOME OR PLACES OTHER THAN THE SCHOOL CAMPUS?										
	.1 \$10-15 .2 \$15-20 .3 \$20-30 .4 \$30-40 .5 More than \$40										
	DO YOU THINK A STUDENT COULD BORROW MONEY IN ORDERS TO GO TO COLLEGE?										
10	.1 Yes2 No										
11	IF YOU COULD BORROW MONEY FOR A COLLEGE OR VOCATIONAL SCHOOL EDUCATION HOW WOULD										
	YOU FEEL ABOUT BORROWING THE MONEY? .1 I would not borrow										
	.2 Somewhat reluctant3 I would borrow the amount needed										
.											
* 12	which MEALS DID YOU EAT YESTERDAY? .1 Breakfast2 Lunch3 Dinner4 Snacks										
	.1 breaklast2 Editon3 bringer										
* 13	WHEN DID YOU EAT SNACKS YESTERDAY?										
,	.1 Morning .2 Afternoon .3 Evening .5 None										
**	MARK AN X TO SHOW WHETHER YOU LIKE OR DISLIKE THE FOLLOWING KINDS OF FOOD, AND										
	ANOTHER X IF YOU ATE THAT FOOD FOR BREAKFAST TODAY, OR FOR LUNCH, DINNER, OR SNACKS YESTERDAY. IF YOU HAD ANY FOOD NOT LISTED WRITE IT IN THE BLANK AT THE END OF THE										
	YESTERDAY. IF YOU HAD ANY FOOD NOT LISTED WRITE IT IN THE BLANK AT THE END OF THE PROPER SECTION.										
	Breakfast Lunch Dinner Snacks										
	BEVERAGES Like Dislike Today Yesterday Yesterday										
14	Cocoa										
15	Coffee										
16	Fruit Juice										
17	Soft Drinks										
18	Tea Tomato Juice										
19	V/J 1 I -										
20	MEIK										
21											

** Items used entirely in this section.

-7-

			Like	Dislike	Breakfast	Lunch	Dinner	Snacks
CD3	CER	EAL PRODUCTS			Today		Yesterday	
	22	Bread, Wheat			••			,
	23	Bread, White				-	***********	
	24	Biscuits,Rolls				-	-	******
	25	Cooked Cereal			-	-		
	26	Cornbread						
	27	Crackers,			-	-		*****
		Chips, etc.						
	28			***********				
	28 29	Dry Cereal		***********			-	-
	47	Macaroni,						
		Spaghetti		-		•		
	30	Pancakes			-		-	
	31	Rice				-	مسجدته	
	32					-	***************************************	**************
		_						
		RY, MISCELLANE	ous fo	ODS				
	33	Butter			-			
	34	Cheese			منيسته			
	35	Cottage Cheese	e		47			
	36	Cream						
	37	Margarine						
	38	Peanut Butter						
	39							
			-					
	FRUI	TS						
	40	Apples						
	41	Bananas		-	C.C.(C.C.)	***********		
	42	Grapefruit				-	-	
	43	Nuts						-
	43 44	Oranges		-		-		*******
	44 45	Peaches		*****		-	•	
		Pears				-		-
	46	- -						
	47	Pineapple					-	
	48			******		-	157	
	MEAT							
	49	Beef		-				
	50	Bacon	-			-	***********	-
	51	Chicken	-		*********	*****		-
	52	Eggs	-		مصنتانيت		-	
	53	Fish						
	54	Ground Beef						
	55	Ham						
	56	Lamb						*******
	57	Lunchmeat						
	58	Liver						
	59	Pork						
	60	Sausage		*	متنفدشتانه			
	61	Veal		OPPOSITE STATE				***********
	62	Wieners		(, , , , , , , , , , , , , , , , , , ,			411.	*********
	63				*********			
						-	***************************************	
	SWEE	TC						
	64	Candy			-		~	
	65	Cake					-	
	66	Cookies				*******		
	67	Donuts, Rolls	-			******	-	
	68	Ico Crosm						

ERIC Provided by ERIC

CD3					Breakfast	Lunch	Dinner	Snacks
			Like	Dislike	Today	Yesterday	Yesterday	Yesterday
	69	Jelly and Jam			ماسين بيسمان	-		
	70	Pie	-			-	-	*****
	71	Pudding			-			
	72	Syrup		***********				
	73					******		
	VEG	ETABLES						
	74	Beans				******		
	75	Broccoli						
CD4	6	Brussell Spro	uts	· companies				*******
	7	Cabbage	,					
	8	Carrots					-	
	9 10	Celery Corn, Hominy						
	11	Green Beans						
	12	Kraut			-	***************************************		
	13	Onions		·		*******		
	14	Peas				************		
	15	Potatoes						
	16	Spinach						
	17	Squash						
	18	Potatoes, Swe	e t					
	19	Tomatoes		-	*************	-	(
	20			~			-	-
22	HAV	.1 4-H .2 FHA or .3 Boy Sc .4 Girl S	ABOUT FFA outs couts	NUTRITION IN	.7 Other .8 None ANY OF THE P	al Educatio		
	PLEA	SE RATE YOUR HE	ALTH C	ON THE FOLLOWI	NG FACTORS:			
*	6 23	HEIGHT .1 Tall		.2 Average	.3 Short			
*	[‡] 24	WEIGHT .1 Over	weight	.2 Abou	t right	. 3 Short		
*	ŧ 25	EYES .1 Alwa	ys Cle	ear2 S	ometimes Irr	itated	3 Often	Irritated
*	[‡] 26	SKIN .1 Alwa	ys Clo	ar2 So	metimes brok	cen out	.3 Often	broken out
*	ŧ 27	APPETITE .1 P	00r	2 Fair	3 Gd	ood		
*	£ 28	HAIR .1 Shin	у	.2 Average_	3 Du	111		
*	ŧ 29	OUTLOOK ON L.				ly unhappy	.3 Hal	f and Half

CD4	*30	WOULD YOUR HEALTH BE BETTER IF YOUR FAMILY HAD MORE MONEY TO SPEND ON FOOD? .1 Yes2 No2
	31	WHO DOES MOST OF THE COOKING?
		PLEASE RATE YOUR FAMILY ON THE FOLLOWING FACTORS:
	* 32	HOW MANY MEALS DID THE ENTIRE FAMILY EAT TOGETHER YESTERDAY?
	*33	WHICH MEALS DOES THE ENTIRE FAMILY USUALLY EAT TOGETHER? .1 Breakfast .2 Lunch .3 Dinner
	34	HOW DO YOU RATE THE COOKING AT HOME? .1 Poor2 Fair3 Good4 Excellent
	35	HOW ATTRACTIVE WAS THE EVENING MEAL LAST NIGHT? .1 Not very attractive2 Fairly attractive3 Very attractive
	36	HOW MUCH DO YOU ENJOY MEALS AT HOME? .1 Not very much2 Average3 Very much
	* 37	WHAT IS THE FAMILY MOOD DURING MEALS? .1 Always strained2 Mostly strained3 Half and Half .4 Mostly cheerful5 Always cheerful

APPENDIX B

	1 - 4	MOTHER'S QUESTIONNAIRE (Please	fill t	his out al	.one.)		
*	6-7	INDICATE THOSE ACTIVITIES WHICH .1 Eat meals at home .2 Confidential talks .3 Play games .4 Social events .5 Go to movies .6 Church attendance or other activities	YOU D	.7 Watch .8 Do ho .9 Do ya .10 Do ch .11 Child	television usework urdwork	ents	•
		HOW MUCH HELP DO YOU GIVE YOUR	CHILD None	WITH THE Little	Average	Considera	ble A Great
*	8	WITH MONEY PROBELMS	(1)	(2)	Amount (3)	Amount (4)	Dea1 (5)
*	9	WITH PERSONAL PROBLEMS					
×	10	WITH SCHOOL PROBLEMS					
*	11	IN MAKING DECISIONS	***********	**************************************			2.
*	12	WHEN IN TROUBLE	-		***************************************		
*	13	HELPFUL ADVICE					
*	14	CHOICE OF CAREER		-		*****	
		HICH ONE OF THE FOLLOWING BEST DESCRIBES:	Weak	Not Very Strong	Strong	Very Strong	Unlimited
×	15	YOUR LOVE FOR YOUR CHILD	(1)	(2)	(3)	(4)	(5)
*	16	THE LOVE YOUR CHILD HAS FOR YOU		-			
			Poor	Below	Average	Good	Excellent
*	17	IN GENERAL, HOW DO YOU RATE YOUR CHILD?	(1)	Average (2)	(3)	(4)	(5)
*	18	HOW DO YOU RATE YOURSELF AS A MOTHER TO YOUR CHILD?			40000		
*	19	HOW WOULD YOUR CHILD RATE YOU AS A MOTHER?		-7			
*	20	RATE YOUR CHILD'S BEHAVIOR TOWARD YOU AS A MOTHER?	D			4000 Gratina	
*	21	RATE YOUR CHILD'S SENSE OF RESPONSIBILITY?		********	4	-	CALLANTING
×	11	tems used in the produ	etic	n of ti	hig the	aie	

	CD6		never	Rarely	Half & Half	Usually	Always
	*22	HOW OFTEN IS YOUR CHILD IN A GOOD MOOD?	(1)	(2)	(3)	(4)	(5)
	* 23	HOW OFTEN ARE YOU IN A GOOD MOOD TOWARD YOUR CHILD?	- Combanyanian		Wilderlandungs		
	* 24	HOW OFTEN DOES YOUR CHILD BEHAN	VE	den nijekun plansk dillerek	Constitutional	************	***************************************
	* 25	HOW OFTEN DO YOU BEHAVE AS YOU CHILD THINKS YOU SHOULD? No			erately	Strongly	Very Strongly
	*2 6	WHEN YOUR CHILD DOES WRONG, HOW DO YOU REACT?	(2)	•	(3)	(4)	(5)
	* 27	IF YOUR CHILD DOES SOMETHING ST DO Show .1 Nothing .2 Hurt .3 Count		•	Restrict	Red	luce Slap o wance7 Hit_
	¥28	WHEN YOUR CHILD DOES SOMETHING .1 Critical2 Indifferent					nusiastically
	*2 9	WHEN YOUR CHILD DOES SOMETHING .1 Do Nothing .2 Compliment_ Money6 Caress or Pat_					5 Gift or
	30	HOW DO YOU AND YOUR SPOUSE WORD 1 Always Disagree2 Usual Agree5 Always Agree					ually
	31-32	AT WHAT AGE DO YOU EXPECT YOUR 16 or less 17 18 19 20		MARRY? (22 23		OUGH ANSWED	
+	33-34	WHAT WOULD YOU MOST LIKE YOUR	CHILD TO	DO AS A L	IFE WORK?		
•	35	HOW MUCH EDUCATION DO YOU THING High School .1 Business School .5					ege .4
•	36	HOW MUCH EDUCATION DO YOU FEEL High School .1 Business School Professional School .5	noo1 .2	Vocatio	nal School	.3 Colle	ge .4
		Complete Dissatis: (1)	•	Somewhat .ssatisfie (2)	-	Fairly Satisfied (4)	Fully Satisfied (5)
		IF YOU WORK, HOW DO YOU FEEL ABOUT YOUR WORK AND SALARY?		\-/	\- /	\ ' /	\- /
	37 38	.2 Salary					
		HOW DOES YOUR HUSBAND FEEL ABOUT YOUR WORK AND SALARY?					
	39 40	.1 Work					

CDO								
41	HOW DO YOU FEEL ABOUT FUTURE OCCUPATION?	Completely		Accept It (3)	Fairly Satisfied (4)			
			Below		del regulato	•		
				erage		Excellent		
42	HOW GOOD A WORKER IS CHILD?	YOUR (1)	(2)	(3) 	(4)	(5)		
43	HOW WOULD YOU RATE YOU CHILD AS A STUDENT?	OUR		nara	******	*********		
* 44	HOW SURE ARE YOU THA .1 No Confidence5 Absolutely Sure_	.2 Very Doubt						
45-46	WHAT DO YOU THINK YOUR CHILD WILL BE DOING THE FIRST YEAR AFTER GRADUATION FROM HIGH SCHOOL?							
	.1 Unskilled Labor				essional			
	.2 Semi-Skilled Labor or Farm Worker	r		Professio Business				
	.3 Skilled worker or	foreman	.10	Vocations	1 School			
	.4 Clerical or Sales			Junior Co College	llege			
	.5 Small business ow .6 Farm owner or ope		•12	correge				
	AFIER YOUR CHILD LEA	VES SCHOOL WH	AT ARE YOUR PL	ANS FOR S	STAYING:			
	12 221 1001 0112	Leave	Leave if	the	Stay a Fe	•		
47	IN LOGAN COUNTY	Immediately	Opportunity	Arises	More Year	rs Permanently		
47	IN LOGAN COUNTY	•	. •		•	•		
48	IN OKLAHOMA	.1	.2		.3	.4		
49 -50	IN WHAT YEAR DID YOU I was born here	COME TO LOGAL	N COUNTY?					
51~52	WHAT WAS THE HIGHEST 1 2 3 4 5	YEAR OF SCHOOL	DLING COMPLETE 10 11 12	D BY YOU? 13 14	? 15 16 1	7 18 19 20		
53-54	PLEASE INDICATE THE OCCUPATION OF THE HEAD OF YOUR HOUSEHOLD:							
	.1 Unskilled (odd jobs, common labor)6 Farm Manager .2 Machine or vehicle operator7 Business Manager .3 Skilled worker (carpenter, etc.)8 Technician (laboratory ass't, draftsman, etc.)							
	.3 Skilled worker (c	arpenter, etc	.)8 Techn	ician (1	boratory a	ss't, draftsman,etc		
	.4 Office Worker		9 Profe	ssional ((doctor, la	wyer, teacher)		
	.5 Salesman		10 Other		Fy			
* 5 5	PLEASE INDICATE THE		F INCOME FOR Y	OUR FAMII				
	.1 Welfare (AFDC, Di .2 Pension	sability, Old			ock mmission			
	.3 Salary or Wages			iness Pro				
	.4 Farm Crops							
* 56	PLEASE INDICATE YOUR	CONDITION OF	EMPLOYMENT FO	R 1967:				
	.1 Was not seeking e	mployment	•4	Employed	l about 6 m l about 9 m			
	.2 Unemployed.3 Employed irregula				ne employme			
	• DEMPTOYED TELEXITY	i	• •	, <u></u>	mravjuc			

	CD6									
*	57- 5	8	(COLUMN 2) OR BY WEEK (COLUMN 3):							
				By Week er \$ 20	\$115					
			Under \$1000 \$6000 Under \$ 80 \$500 Under \$ 80 About 1000 7000 About 80 580 About		130					
			2000 8000 170 670	40	150					
			3000 9000 250 750 4000 10000 330 830	60 80	170 190					
			5000	100	water the same					
	5	. 9 :	PLEASE INDICATE HOW YOU FEEL ABOUT YOUR FAMILY INCOME:							
.1 Not nearly enough2 Just enough to get along3 Sufficient										
			.4 Ample, allows savings							
	60 IF PART OF THE FAMILY'S INCOME IS DERIVED FROM A FARM, INDICATE WHICH OF T									
FOLLOWING APPLIES: FAMILY HEAD: .1 Owns, operates farm2 Is far tenant3 Works on farm for wages										
	-	:1	DIEASE INDICATE THE ARTITTY OF THE FAMILY TO HELP THE SON OR DA	MIGHTER AT	rend					
61 PLEASE INDICATE THE ABILITY OF THE FAMILY TO HELP THE SON OR DAUGHTER ATT VOCATIONAL SCHOOL OR COLLEGE AFTER FINISHING HIGH SCHOOL:										
			.1 Unable to help .2 Give small amount of help .3 Give .4 Give whatever help needed	considera	ble help_					
	6	52	INDICATE THE FOODS LISTED BELOW THAT ARE PRODUCED AT HOME FOR E	FAMILY CON	SUMPTION:					
			.2 Milk .5 Fruit							
			.3 Meat6 None							
	* 6	53	WHAT MEALS DID YOUR CHILD EAT AT HOME YESTERDAY?							
			.1 Breakfast2 Lunch3 Dinner4 Snacks							
	* (54	HOW WOULD YOU RATE YOUR CHILD'S APPETITE? .1 Poor2 Fair3 Good4 Excellent							
			5 .1 An adult homemaking class .1 No .2 Yes							
66 .2 Farm women's club .1 No2 Yes										
			AVE ANY OF THE FOLLOWING EVER OCCURED: HAVE YOU VISITED THE OFFICE OF LOGAN COUNTY HOME ECONOMIST?	.1 No	2 Vae					
	•	- •								
	•	58	HAS SHE EVER VISITED YOUR HOME?	.1 No	.2 Yes					
	6	59	HAVE YOU EVER VISITED THE OFFICE OF LOGAN COUNTY AGRICULTURAL		•					
			EXTENSION AGENT?	.1 No	.2 Yes					
	7	70	HAS THE AGRICULTURAL EXTENSION AGENT EVER VISITED YOUR HOME?	.1 No	.2 Yes					
	7	71 H	HAVE YOU EVER ATTENDED A FOOD DEMONSTRATION BY THE GAS OR							
			ELECTRIC COMPANY?	.1 No	.2 Yes					
	7	72	HAVE YOU EVER ATTENDED A FOOD DEMONSTRATION GIVEN BY THE							
			LOGAN COUNTY HOME ECONOMIST?	.1 No	.2 Yes					

THANK YOU AGAIN FOR YOUR ASSISTANCE IN THIS RESEARCH.

YOUR INITIALS: