



Educational and occupational expectations of high school students on the Flathead Indian Reservation
by Robert Meyer Peregoy

A thesis submitted in partial fulfillment of the requirements for the degree of DOCTOR OF
EDUCATION

Montana State University

© Copyright by Robert Meyer Peregoy (1979)

Abstract:

The purpose of this study was to determine whether significant relationships existed between the educational and occupational expectations of American Indian and white high school students with respect to sex, student grade level, parents' education, parents' occupation and family income.

The educational and occupational expectations of the subjects of this study were divided into low, medium and high categories. The study was based on 108 Indian and 418 white students attending high schools on the Flathead Reservation during the 1978-79 school year.

The raw data for this study consisted of information on eight independent variables and were tested using chi square. The statistical difference was considered significant at the .05 level of confidence.

The data for the variables were obtained by administering a questionnaire in seven high schools.

Significant relationships were found between the educational expectations of: (1) females with respect to ethnicity; (2) Indian males with respect to grade level; (3) Indian and white students with respect to high amount of fathers' education; (4) Indian and white students with respect to low amount of mothers' education; (5) all students with respect to category of fathers' occupation, category of mothers' occupation and level of family income.

Significant relationships were found between the occupational expectations of: (1) Indian students with respect to sex; (2) white students with respect to sex; (3) all students with respect to amount of fathers' education, amount of mothers' education, category of fathers' occupation, and level of family income.

© 1979

ROBERT MEYER PEREGOY

ALL RIGHTS RESERVED

University
Microfilms
International

300 N. ZEEB ROAD, ANN ARBOR, MI 48106

EDUCATIONAL AND OCCUPATIONAL EXPECTATIONS
OF HIGH SCHOOL STUDENTS ON THE
FLATHEAD INDIAN RESERVATION

by

ROBERT MEYER PEREGOY

A thesis submitted in partial fulfillment
of the requirements for the degree

of

DOCTOR OF EDUCATION

Approved:

John W. Fohl
Chairperson, Graduate Committee

Ed Stohmayer
Head, Major Department

Henry L. Parsons
Graduate Dean

MONTANA STATE UNIVERSITY
Bozeman, Montana

May, 1979

ACKNOWLEDGMENT

The writer wishes to express his gratitude and appreciation to the members of his committee. He is especially thankful to them for their most positive encouragement and patience.

Special thanks is given to Dr. John Kohl for his most astute and scholarly guidance in solving the many problems encountered during the course of this dissertation.

The researcher is especially appreciative of the statistical assistance given him by Dr. Albert Suvak, Head of the Testing and Counseling Center, and Dr. Eric Strohmeyer, Head, Department of Educational Services. The writer is thankful for the patience and consideration displayed by the staff and students of the Center for Native American Studies during the final stages of this dissertation.

Finally, the writer dedicates this dissertation to his beloved parents, Buzz and Donna Peregoy, and thanks them for their love and encouragement throughout life, without which this endeavor would not have been possible.

TABLE OF CONTENTS

	<u>Page</u>
VITA	ii
ACKNOWLEDGMENT	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vii
ABSTRACT	x
 Chapter	
I. INTRODUCTION	1
Statement of the Problem	3
Contribution to Educational Literature	4
General Questions to be Answered	5
General Procedures	8
Limitations of the Study	8
Definition of Terms	9
Summary	10
II. REVIEW OF THE LITERATURE	11
General Theories of Career Development	11
Occupational Expectations	18
Educational Expectations	26
Socioeconomic Status, Educational Attainment and American Indian Students	35
Educational Attainment and the Flathead Indian Reservation	43
III. PROCEDURES	53
Population	53
Method of Collecting Data	54
Method of Organizing Data	55
Hypotheses	57
Analysis of Data	60
Precautions for Accuracy	61
Summary	61

	<u>Page</u>
IV. ANALYSIS OF DATA	63
Educational Expectations	64
Male Ethnicity	64
Female Ethnicity	65
Indian Males and Grade Level	66
White Males and Grade Level	67
Indian Females and Grade Level	68
White Females and Grade Level	69
Sex of Indian Students	70
Sex of White Students	71
Fathers' Education	72
Mothers' Education	74
Fathers' Occupation	77
Mothers' Occupation	81
Family Income	85
Occupation Expectations	89
Male Ethnicity	89
Female Ethnicity	89
Indian Males and Grade Level	90
White Males and Grade Level	92
Indian Females and Grade Level	92
White Females and Grade Level	93
Sex of Indian Students	94
Sex of White Students	96
Fathers' Education	97
Mothers' Education	101
Fathers' Occupation	104
Mothers' Occupation	109
Family Income	111
Summary	116
V. CONCLUSIONS, DISCUSSION, RECOMMENDATIONS AND SUMMARY	119
Educational Expectations	119
Ethnicity	119
Grade Level in School	120
Sex of Respondents	122
Fathers' Education	123
Mothers' Education	125

	<u>Page</u>
Fathers' Occupation	126
Mothers' Category of Occupation	128
Family Income	130
Occupational Expectations	132
Ethnicity	132
Grade Level in School	133
Sex of Respondent	134
Fathers' Education	136
Mothers' Education	138
Fathers' Occupation	139
Mothers' Occupation	141
Family Income	142
Recommendations	144
Summary and Implications for Further Research	147
LITERATURE CITED	148
APPENDIX	161

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Chi Square Analysis of Educational Expectations of Males by Ethnicity	64
2. Chi Square Analysis of Educational Expectations of Females by Ethnicity	65
3. Chi Square Analysis of Educational Expectations of Indian Males by Grade Level	67
4. Chi Square Analysis of Educational Expectations of White Males by Grade Level	68
5. Chi Square Analysis of Educational Expectations of Indian Females by Grade Level	69
6. Chi Square Analysis of Educational Expectations of White Females by Grade Level	70
7. Chi Square Analysis of the Educational Expectations of Indian Students by Sex of Student	71
8. Chi Square Analysis of Educational Expectations of White Students by Sex of Student	72
9. Chi Square Analysis of Educational Expectations of Indian and White Students by Amount of Fathers' Education	73
10. Chi Square Analysis of Educational Expectations of Indian and White Students by Amount of Mothers' Education	76
11a. Chi Square Analysis of Educational Expectations of Indian and White Students by Category of Fathers' Occupation	78
11b. Chi Square Analysis of Educational Expectations of All Students by Categories of Fathers' Occupation	80

<u>Table</u>	<u>Page</u>
12a. Chi Square Analysis of Educational Expectations of Indian and White Students by Category of Mothers' Occupation	82
12b. Chi Square Analysis of Educational Expectations of All Students by Categories of Mothers' Occupation	84
13a. Chi Square Analysis of Educational Expectations of Indian and White Students by Family Income	86
13b. Chi Square Analysis of Educational Expectations of All Students by Level of Family Income	88
14. Chi Square Analysis of Occupational Expectations of Males by Ethnicity	90
15. Chi Square Analysis of the Occupational Expectations of Females by Ethnicity	91
16. Chi Square Analysis of Occupational Expectations of Indian Males by Grade Level	91
17. Chi Square Analysis of Occupational Expectations of White Males by Grade Level	92
18. Chi Square Analysis of Occupational Expectations of Indian Females by Grade Level	93
19. Chi Square Analysis of Occupational Expectations of White Females by Grade Level	94
20. Chi Square Analysis of Occupational Expectations of Indian Students by Sex of Student	95
21. Chi Square Analysis of Occupational Expectations of White Students by Sex of Student	97
22a. Chi Square Analysis of Occupational Expectations of Indian and White Students by Amount of Fathers' Education	98

<u>Table</u>	<u>Page</u>
22b. Chi Square Analysis of Occupational Expectations of All Students by Amount of Fathers' Education	100
23a. Chi Square Analysis of Occupational Expectations of Indian and White Students by Amount of Mothers' Education	102
23b. Chi Square Analysis of Occupational Expectations of All Students by Amount of Mothers' Education	104
24a. Chi Square Analysis of Occupational Expectations of Indian and White Students by Category of Fathers' Education	106
24b. Chi Square Analysis of Occupational Expectations of All Students by Categories of Fathers' Occupation	108
25a. Chi Square Analysis of Occupational Expectations of Indian and White Students by Category of Mothers' Occupation	110
25b. Chi Square Analysis of Occupational Expectations of All Students by Categories of Mothers' Occupation	112
26a. Chi Square Analysis of Occupational Expectations of Indian and White Students by Family Income	113
26b. Chi Square Analysis of Occupational Expectations of All Students by Family Income	115

ABSTRACT

The purpose of this study was to determine whether significant relationships existed between the educational and occupational expectations of American Indian and white high school students with respect to sex, student grade level, parents' education, parents' occupation and family income.

The educational and occupational expectations of the subjects of this study were divided into low, medium and high categories. The study was based on 108 Indian and 418 white students attending high schools on the Flathead Reservation during the 1978-79 school year.

The raw data for this study consisted of information on eight independent variables and were tested using chi square. The statistical difference was considered significant at the .05 level of confidence. The data for the variables were obtained by administering a questionnaire in seven high schools.

Significant relationships were found between the educational expectations of: (1) females with respect to ethnicity; (2) Indian males with respect to grade level; (3) Indian and white students with respect to high amount of fathers' education; (4) Indian and white students with respect to low amount of mothers' education; (5) all students with respect to category of fathers' occupation, category of mothers' occupation and level of family income.

Significant relationships were found between the occupational expectations of: (1) Indian students with respect to sex; (2) white students with respect to sex; (3) all students with respect to amount of fathers' education, amount of mothers' education, category of fathers' occupation, and level of family income.

Chapter 1

INTRODUCTION

Postsecondary educational and occupational opportunities for American Indians have greatly increased over the past decade. This burgeoning of increased opportunities is a reflection of positive responses of both the private and public sectors to the educational, economic, social, legal, and cultural needs of American Indian peoples.

Since the 1960's there has been a considerable change in the expressed policy of the federal government toward Indian people, a change that is a direct response on the part of the government to the expressed needs of Indian people for control over their own affairs. The United States government has begun to recognize the expressed needs set forth by Indian people as a legitimate basis for Indian social and economic self-sufficiency.

Public and private programs affecting Indian people are now being planned, implemented, and evaluated by Indian people. Indian community action programs, initiated by the Office of Economic Opportunity and now administered by the Administration of Native American Programs in the Department of Health, Education, and Welfare, marked the launching point for local control and self-determination on an accelerated basis. The new policy of the federal government, "Self-Determination Without Termination," was expressed by the President of the United States on July 8, 1970 (U.S. President, 1969-1974, Nixon:1).

This, then, must be the goal of any new national policy toward the Indian people: To strengthen the Indian's sense of autonomy without threatening his sense of community. We must assure the Indian that he can assume control of his own life without being separated involuntarily from the tribal group. And, we must make it control without being cut off from federal concern and federal support.

On December 5, 1975, Public Law 93-638, "The Indian Education and Self-Determination Act," went into effect. This law allows for tribal governments to control and operate federal programs, including educational services, which relate to Indian people. The implications in terms of self-determination can be far-reaching. In both the public and private sectors affirmative action programs are opening doors of employment opportunities in government and business, heretofore generally inaccessible or closed to Indian people.

Some 18,680 Indian students received grants from the Bureau of Indian Affairs to enable them to attend college in 1976-77. This compares to approximately 1,700 students ten years ago, or an elevenfold increase during the last decade. Further, tribal scholarships and private grants have increased on an accelerated basis during the past ten years. In addition, more than 10,000 Indians received vocational training or on-the-job training in 1976-76 (Canan, 1976:1-2).

Yet, notwithstanding these opportunities, American Indian students and their elders lag behind the general population of the country in educational achievement and employment. The research is replete with studies documenting this lag with respect to school enrollment,

achievement as measured by standardized tests, overageness per grade level, number of years of schooling, school competition, college enrollment, college graduation, job placement and wages and salaries earned (Coombs, 1970:19). The United States Civil Rights Commission issued a report in August of 1978, providing current documentation focusing on social indicators of equality of minorities and women. Again, by almost every measure, Indian people ranked the lowest in education, employment, wages and salaries earned, housing, and other areas (United States Commission on Civil Rights, 1978:5-93).

A review of the literature indicated that many high school seniors, regardless of ethnic background, aspire to educational and occupational levels without a realistic knowledge of the qualifications and skills necessary to attain their aspirations. The increased emphasis on career education and planning by the U.S. Government and school systems is a response to this. In order to better prepare high school students for postsecondary educational and occupational opportunities, additional information regarding factors affecting high school students' postsecondary educational and occupational expectations is needed.

Statement of the Problem

The general problem of this study was to determine whether significant relationships existed between the educational and occupational expectations of American Indian and white high school students

attending schools on the Flathead Indian reservation with respect to sex of the student, grade level, amount of parents' education, category of parents' occupation, and family income. A secondary purpose was to determine whether there were significant differences between the educational and occupational expectations of Indian and white students in the tenth and twelfth grades.

Contribution to Educational Literature

A review of the literature revealed that a considerable amount of research has been completed on the educational achievement of Indian children. However, only a small portion of this research has addressed the postsecondary educational and occupational expectations of Indian and non-Indian students in a comparative sense. Two studies have been conducted in four rural Montana high schools, comparing selected characteristics affecting educational aspirations of Indian and white students. Another study focused on parents' influence on white and Indian students' educational aspirations and expectations. No studies, to this researcher's knowledge, of the nature of the one proposed herein have been conducted in Montana or the Pacific Northwest. The study proposed herein will provide data regarding postsecondary educational and occupational expectations of students attending high schools on the Flathead Reservation. The data can be used in high school career

education programs and by community colleges and universities in program planning, counseling and guidance.

General Questions to be Answered

This researcher attempted to answer the following questions:

1. Are there significant differences between the educational expectations of male Indian and male white students?
2. Are there significant differences between the educational expectations of female Indian and female white students?
3. Are there significant differences between the educational expectations of Indian males in the tenth and twelfth grades?
4. Are there significant differences between the educational expectations of white males in the tenth and twelfth grades?
5. Are there significant differences between the educational expectations of Indian females in the tenth and twelfth grades?
6. Are there significant differences between the educational expectations of white females in the tenth and twelfth grades?
7. Are there significant differences between the educational expectations of male Indian and female Indian students?
8. Are there significant differences between the educational expectations of male white and female white students?

9. Are there significant differences between the educational expectations of Indian and white students with respect to amount of fathers' education?

10. Are there significant differences between the educational expectations of Indian and white students with respect to amount of mothers' education?

11. Are there significant differences between the educational expectations of Indian and white students with respect to category of fathers' occupation?

12. Are there significant differences between the educational expectations of Indian and white students with respect to category of mothers' occupation?

13. Are there significant differences between the educational expectations of Indian and white students with respect to family income?

14. Are there significant differences between the occupational expectations of male Indian and male white students?

15. Are there significant differences between the occupational expectations of female Indian and female white students?

16. Are there significant differences between the occupational expectations of Indian males in the tenth and twelfth grades?

17. Are there significant differences between the occupational expectations of white males in the tenth and twelfth grades?

18. Are there significant differences between the occupational expectations of Indian females in the tenth and twelfth grades?

19. Are there significant differences between the occupational expectations of white females in the tenth and twelfth grades?

20. Are there significant differences between the occupational expectations of male Indian and female Indian students?

21. Are there significant differences between the occupational expectations of male white and female white students?

22. Are there significant differences between the occupational expectations of Indian and white students with respect to amount of fathers' education?

23. Are there significant differences between the occupational expectations of Indian and white students with respect to amount of mothers' education?

24. Are there significant differences between the occupational expectations of Indian and white students with respect to category of fathers' occupation?

25. Are there significant differences between the occupational expectations of Indian and white students with respect to category of mothers' occupation?

26. Are there significant differences between the occupational expectations of Indian and white students with respect to family income?

General Procedures

This researcher solved the problem by administering a twelve item questionnaire to sophomores and seniors attending high schools on the Flathead Reservation. The questionnaire was designed to gather personal background information, as well as postsecondary educational and occupational expectations. Data were analyzed in cooperation with the Testing and Counseling and Computer Centers at Montana State University. Students from the following high schools on the Flathead Reservation were interviewed: Arlee, Charlo, Hot Springs, Polson, Ronan, St. Ignatius, and the Two Eagle River School.

Limitations of the Study

This study was limited to: (1) only those sophomores and seniors attending high schools on the Flathead Reservation the day the questionnaire was administered; (2) the information supplied by the respondents during the interviews; and (3) the recognition that educational and occupational expectations are subject to change; therefore, the findings herein are no guarantee of actual behavior.

Definition of Terms

Educational Expectation

For the purposes of this study, educational expectation was defined as (1) the number of years of secondary or postsecondary education, either higher education or vocational education, which the student expected to attempt or complete, and (2) the level of completion (associate, bachelor's, master's, doctoral, professional degrees or vocational competency certification) which the student expected to attain.

Occupational Expectation

For the purpose of this study, occupational expectation was defined as the occupational classification delineated by the Bureau of the Census, which the student expected to enter after completion of his or her formal education.

American Indian

For the purpose of this study, the Title IV definition of American Indian was used. Title IV defines an American Indian as an enrolled member of a federally recognized tribe or a descendant in the first or second degree of an enrolled member of a federally recognized tribe.

Summary

The process of career development is lifelong and contingent upon many factors, including a person's sex, ethnicity, amount of parents' education, category of parents' occupation and family income. Educational and occupational opportunities for American Indians have greatly increased during the past decade. These opportunities can facilitate the social, legal, economic, and cultural self-determination of American Indian people. The rate and extent to which this becomes realized is highly dependent upon the postsecondary educational and occupational decisions of American Indian youth. The purpose of this study was to examine selected factors affecting the educational and occupational expectations of Indian and white youth attending high schools on the Flathead Reservation during the 1978-79 school year.

Chapter II

REVIEW OF THE LITERATURE

The review of the literature is divided into five sections. The first section presents information concerning general theories of career development. The second section is a review of studies relating to the occupational expectations of youth, while the third section of the chapter focuses on studies concerning the educational expectations of youth. The fourth section is a presentation of educational attainment of American Indian youth, and the fifth section is a review of education on the Flathead Indian Reservation in northwestern Montana.

General Theories of Career Development

The role of work holds an important place in an individual's life. Educators, social scientists, and psychologists have established theoretical constructs in an effort to gain insight into and understand why people choose different varieties of work. Osipow (1968:10-12) offered a classification of four distinct approaches to theories of career development.

The oldest theoretical approach has been known commonly as the trait-factor approach (1968:10). This system accepts the thesis that individuals have interests and abilities which can be matched with the world's many vocational opportunities. Once this process is completed, through aptitude and vocational testing, the individual is encouraged

to follow a particular vocational pattern commensurate with his or her abilities, interests, and aptitudes; when this is accomplished the problems of vocational choice for the individual are solved.

A second approach recognized by Osipow (1968:11) has been described as the sociological model of career development. This approach considers one's environment as a central tenet; certain circumstances beyond the control of the individual contribute significantly to the career choices one makes. The central task confronting people is the development of techniques to cope effectively with the environment. According to Osipow, this approach is illustrated in the work of Hollingshead (1949), Miller and Form (1951), and Caplow (1954).

A third theoretical approach identified by Osipow is referred to as the development or self-concept model. This approach embodies as its central tenets that (1) individuals develop more clearly defined self-concepts as they grow older, although these are modified to conform to changes in one's view of reality as one increases in age; (2) people develop images of the occupational world which they compare with self-concept images in attempting to make career decisions; and (3) the adequacy of the eventual career decision is based on the similarity between an individual's self-concept and the vocational concept of the career he or she eventually chooses. According to Osipow, the works of Ginzburg and his associates (1951) and Super (1953) exemplify this approach.

A fourth category Osipow termed (1968:11-12) the personality approach to the study of career development. He noted the ideas range from lists of needs involved in the process of vocational choices as seen by Hoppock (1957) and the detailed personality types for career areas delineated by Holland (1959) to the assorted studies of Roe (1957) and others. Osipow (1968:12) concluded that these types of career development models are not independent of one another; they are closely interrelated and often draw upon one another in terms of actual practice and in empirical research.

Hollingshead (1949), Miller and Form (1951), Caplow (1954) and others have set forth theories that deal with social influences and career development. Hollingshead (1949:441-447) noted that vocational choices correspond with job patterns associated with each social class in the adult work world. Based on this, Hollingshead postulated that adolescents' ideas of desirable jobs are a reflection of their experiences in the class and "family culture complexes."

Miller and Form suggested (Hoppock, 1967:90) a career development theory based on a network of interrelated social factors associated with occupational levels. Social background, native ability, historical circumstances, and acquired personality traits are the influences determining a given career pattern.

Ginzburg (1951), Super (1953), and Tiedeman (1963,1975) postulated that there are logical relationships from birth to death which affect

one's career choice. Ginzburg (1951:185-198) and his associates proposed that vocational development occurs in three developmental stages: fantasy, tentative, and realistic. During the fantasy, or prevocational stage before the age of eleven, a variety of activities occur which have a tendency to promote the readiness of the individual to deal with issues of vocational concern raised during adolescence. During this stage, the youngster thinks about an occupation for adulthood, believing he or she can assume any occupation desired, without regard for abilities or other requirements.

In the tentative period, occurring between the ages of twelve and seventeen, the individual focuses on the identification and analysis of likes and dislikes, and concern about abilities, skills, and performance characteristics. Near the end of this period, the individual realizes that many subjective factors have characterized his or her tentative choices, and that more realistic considerations must be undertaken in order to achieve a relationship between knowledge of abilities and interest and values.

During the realistic stage, a transition occurs when the individual recognizes a need for a realistic vocational preference and actual choice. This period includes seeking additional training or entry into the job market.

Super (1953:188-189) identified five phases of career development in his theoretical constructs: growth, exploration, establishment,

maintenance, and decline. He emphasized the life span rather than limiting attention on the adolescent period and dealt with the notion of the interaction between the development of vocational preferences and the attempt to implement one's self-concept through a career (1953:189). A basic assumption in this approach is that a person will be more satisfied and effective in a career to the degree the individual is able to implement his or her self-concept through the career each chooses.

Tiedeman (1963; 1975:15-16) divided his theoretical construct of career decision making into the two concepts of anticipation and accommodation. The anticipation aspect, including the stages of exploration, crystallization, choice, and clarification, consists of a person's preoccupation with facts, alternatives, options, and consequences. From these a career decision is made with aspirations, hopes, and expectations. The accommodation aspect, including the stages of induction, reformation, and integration, is reached when imagination meets reality. In the accommodation stage, the individual is acting upon a decision that has been thought about, however well made or clarified.

Hoppock (1957) and Holland (1959) followed theoretical approaches similar to Super. Hoppock (1967:91-92) offered a "composite" theory of vocational development:

1. Occupations are chosen to meet needs.
2. The occupation that we choose is the one that we believe will best meet the needs that most concern us.
3. Needs may be intellectually perceived, or they may be only vaguely felt as attractions which draw us in certain directions. In either case, they may influence choice.
4. Career development begins when we first become aware that an occupation can help to meet our needs.
5. Career development progresses and occupational choice improves as we become better able to anticipate how well a prospective occupation will meet our needs. A capacity thus to anticipate depends upon our knowledge of ourselves, our knowledge of occupations, and our ability to think clearly.
6. Information about ourselves affects occupational choice by helping us to recognize what we want and what we have to offer in exchange.
7. Information about occupations affects occupational choice by helping us to discover the occupations that may meet our needs, what these occupations offer to us, and what they will demand of us.
8. Job satisfaction depends upon the extent to which the job that we hold meets the need that we feel it should meet. The degree of satisfaction is determined by the ratio between what we have and what we want.
9. Satisfaction can result from a job that meets our needs today, or from a job that promises to meet them in the future, or from a job that we think will help us to get the job we want.
10. Occupational choice is always subject to change when we believe that a change will better meet our needs.

Hoppock (1967:96-97) stated that illogical occupational choice behavior has three primary sources: when people have inadequate

information about themselves, inadequate information about occupations and an inability to think clearly. Holland (1959:40-41) noted that persons with more information about the occupational environments make more adequate occupational choices than do persons with less information. Adequacy is a function of age, "since time alone provides more learning opportunities."

The literature reviewed in this section presented theoretical concepts that indicated a variety of factors are inherent in the development of occupational choice. From these readings, it is evident that, as Osipow has suggested, the various theories cited are somewhat inter-related.

Osipow (1975:12) noted that while the theories have some validity, their concepts do not universally apply to all populations. He stated that attempts have been made to apply concepts and theories to varied populations under a multitude of conditions and that most investigators fail to differentiate among subgroups studied. He (1975:13) asserted that "the notion of increasing differentiation in the application of career development concepts" to special groups is important. The following section addresses factors influencing occupational expectations of youth.

Occupational Expectations

Several researchers have compiled extensive bibliographies addressing the occupational expectations of youth. Kuvelsky and Ohlendorf (1966), Kuvelsky and Reynolds (1970), and Horner, Baterbaugh, and Carefoot (1967) have delineated various categories in their bibliographical presentations, including socioeconomic, family, personal, and ethnic factors affecting occupational choice.

Researchers who have studied the educational and occupational orientations of youth have emphasized the importance of distinguishing between aspirations and expectations. Kuvelsky and Bealer (1966:273-276) noted two types of projections. The one dealing with desires is aspiration and the other, dealing with anticipation, is expectation. The authors (1966:273) stated, "expectations should not be equated with aspirations, for the object involved with an expectation need not be desired and, therefore, need not be a goal." An aspiration refers to a person's orientation toward a goal, whereas expectation is the individual's estimation of probable attainment of that goal.

A variety of factors influence occupational aspirations and expectations. Studies have been conducted to determine the effect of socioeconomic background on aspirations and expectations. Reissman (1953:241) found that the relationship between social class and aspiration is not a simple one: successful achievement in the past does not

necessarily mean higher aspirations in the future. Several researchers have reported that the majority of youth from all socioeconomic groups aspire to high occupational levels (Campbell and Parsons, 1972:416-417; Heinsohn, 1978:36). Heinsohn (1970:36-37) surveyed 18,612 high school seniors and found that 50 to 80 percent of each group of students by race and sex aspired to enter prestigious occupations. Although the percentages of each group actually expecting to hold high prestige occupations was less than those who aspired to these occupations, more expected to enter high status jobs than expected to enter low status occupations.

Simmons and Rosenberg (1971:239-241) reported that children in Baltimore schools in grades three through twelve did not appear to accept the doctrine of equality of opportunity; 70 percent of the respondents stated that some students do not have as good a chance as others in their occupational aspirations. The majority (97 percent), however, were confident they had a good or better chances than anyone else for upward social mobility.

Sewell, Haller, and Strauss (1957:69) found that females from high status families more frequently chose high level occupations than those of lower status families, but that the relationship was not as consistent as the relationship between status and aspiration to attend college. Males from high status families were likely to have higher level occupational aspirations than were those from lower status families.

They concluded that socioeconomic status makes an independent contribution to occupational aspirations.

Caro and Philbrand (1965:468) scrutinized sources of social class differences in the occupational goals of male high school students. Their findings were consistent with previous studies showing that upper social class students aspire to higher occupational levels than lower class students. The data also indicated a larger disparity between occupational aspirations and expectations for lower-class students.

Empey (1956:708) found that the absolute occupational status aspirations of male high school seniors from the middle and upper classes were significantly higher than those of seniors from the lower classes. He suggested that lower class youth have limited their occupational aspirations to the class horizons. He concluded that while lower class youngsters aspired to get ahead, they aspired to occupations at different station levels than those from higher strata, and that lower class youngsters may be more strongly motivated to achieve (relatively speaking) than those in strata above them.

Recent studies have found strong support for the effect of socioeconomic status on the occupational expectations of youth and indicated that children from higher socioeconomic background tend to have higher occupational expectations than children from lower socioeconomic backgrounds (Oberle, Stowers, and Darby, 1974:101; Cosby and Picou, 1975: 17-20; Bogie, 1976:253-254; McLaughlin, Hunt and Montgomery, 1976:

161-162; Harvey and Kerin, 1978:265-266). Picou and Cosby (1975:17-20) found that socioeconomic status had the greatest effect on occupational aspiration and that the effect of race was negligible when controls were applied.

Studies reviewed indicate clearly that parental occupational and educational status are correlated with occupational aspirations and expectations of children. Simpson (1962:519) found strong support for the hypotheses that parental influence is associated with family aspirations among working-class boys, and also with ambition among middle-class boys. Cohen (1965:425) noted that the fewer working class jobs the parent finds acceptable for any offspring, the higher is the probability of having a mobile son.

Picou and others (1974:17) found that mothers' education significantly influenced black and white females' career aspirations, while school performance and peer modeling significantly influenced male career aspirations. Wijting, Arnold, and Conrad (1978:257-259) reported that childrens' work values were most similar to those of their like-sexed parent at early grade levels, but twelfth grade boys' and girls' work values were most like their fathers.

The effect of ethnicity on an individual's occupational aspirations and expectations has been the subject of the literature, particularly in the past ten years. Venegas (1973:91) concluded in a study of El Paso high school students that all students, regardless of

ethnicity, have high aspirations and expectations for education and occupation. Thomas (1976:49) found black and white boys between the ages of fifteen and eighteen years aspired to and expected to enter jobs at similar socioeconomic levels. Debord (1977:95) reported that career expectations of blacks depend less on socioeconomic status than do career expectations of whites.

Pentecoste (1975:439) suggested that minority inner-city children differ in their perceptions of the world of work depending upon the occupational level of their families. The number of visible models for superior or high aspiring students may be very limited in small towns or areas that have a low socioeconomic level. Uzell (1961:669) recognized that the general occupational structure of minority groups is not likely to include a representative cross section of occupations nor a concentration of high status ones, but rather a concentration of low status ones. Lorenz (1972:371-398) postulated that racially patterned differences in the status attainment process should be expected as membership in a racial group has a great impact in all facets of life.

Kuvelsky and Monk (1975:31) found that non-metropolitan Mexican-American teenage boys and girls in the border area of Texas did not experience much change in the nature or level of educational and occupational status projections between 1967 and 1973. The youths surveyed maintained a relatively high level of mobility aspirations and expectations and a strong intensity of desire for achieving goals. The

authors found a slight, consistent shift towards managerial type jobs and a movement away from lower prestige professional jobs. Berman and Haug (1975:175) reported that blacks who aspire to high educational and occupational goals are as optimistic about attaining their objectives as high aspiring whites.

Other studies have focused on the interrelationship of ethnicity, sex, and grade level as these variables affect occupational expectations. Sollie (1974:12-13) reported that occupational goal deflection (discrepancy between aspirations and expectations) varied among youth surveyed in five southern states. Females experienced less goal deflection than males and whites experienced less goal deflection than blacks. The author concluded that race appeared to be the major determinant of occupational goal deflection. Boyd found (1974:2-5) that expectations of low status jobs increased among black boys and decreased among white girls between 1967 and 1973.

Cosby (1969:16-17) reported data that indicated a high proportion of students in all social subclasses had high level occupational aspirations. Approximately one-half of the students in the more disadvantaged groups had high level aspirations. For example, 53 percent of the rural black students whose fathers had low level occupations and education had high level occupational aspirations. He concluded that the variables exerting the most influence were fathers' education and occupation. Kelley and Wingrove (1975:54-55) found that occupational

expectations of blacks reach a low point in the ninth grade and increase afterwards up to the twelfth grade.

Spencer (1973:1-3) studied the aspirations and expectations of Mississippi high school students from the Choctaw Tribe. She found that occupational aspirations and expectations appeared to have been limited largely to those occupations which were visible on or near the reservation area. Spencer suggested this finding indicated a lack of knowledge of the range of occupations that currently exist. One explanation she rendered is there may be a lack of exposure to or acquaintance with persons who occupy a wide range of moderate and high status occupations.

Kuvelsky and others (1976:36-42) attempted to determine the extent to which ethnic variability existed in reference to male and female occupational aspirations and expectations. They surveyed 385 Arizona Navajos, 192 Texas Blacks, 206 Texas Anglos, and 379 Texas Mexican-Americans. Significant results were (1) Navajo youth had the lowest level of occupational aspirations and the weakest intensity of desire; (2) Mexican-Americans had the highest and strongest intensity of aspirations; (3) Mexican-American females had the highest level of aspirations; (4) Mexican-Americans had the highest level of expectations and Navajos had the lowest level; (5) Anglo expectations paralleled those of the Navajos, and Anglo females had the lowest expectation

level; (6) Navajos and Anglos were considerably more certain about occupational expectations than Blacks who were relatively uncertain.

Roulston (1971) and Wall (1976) surveyed the postsecondary projections of Alaska Natives. Roulston (1971:56-61) interviewed BIA boarding school students from Anchorage, Fairbanks, Southeast Alaska, Bethel, and Nome. The findings indicated that 97.8 percent intended to finish high school, 28 percent planned to go to college, 12 percent planned to attend a vocational school, 20 percent planned to get a job after high school, and 30 percent had no definite plans. Wall (1976: 1-2) provided information about 1970-1975 graduates from Kotzebue Bureau of Indian Affairs day school. The respondents had participated in Kotzebue career education programs. Of 83 graduates between 1970 and 1975: 40 percent entered college, 17 percent entered technical training, 7 percent entered the military service, 25 percent chose full-time employment, and 11 percent opted for seasonal employment and subsistence living.

The volume of literature reporting the effect of a person's sex on occupational expectations has increased over the past few years. Several studies indicated that female high school students expected to enter less prestigious occupations than males (Drabick, 1974:7; Burlin, 1976:102; Bogie, 1976:253-255; High School Student Survey, 1977:4). The authors attributed these findings to traditional sex-role stereotyping and the effect thereof on the occupational expectations of youth.

Edington (1975:35) reported in a study of American Indian, Mexican-American and white tenth and twelfth graders that significant differences in occupational expectations were found due to sex; females expected to enter significantly less professional occupations than males. In contrast to these findings, Aldag (1975:312-318) found the occupational expectations of males and females to be similar. Debord (1977:98-100) noted that sex differences among Mississippi high school students were of less importance among black students than white students.

This section of the chapter has been a presentation of the literature dealing with occupational expectations of youth. There are many factors influencing one's vocational development. Those reviewed included socioeconomic status, including occupation and education of parents, ethnicity, grade level, and sex of students. The following section addresses factors influencing educational expectations.

Educational Expectations

Closely associated with the process of developing occupational aspirations and expectations is the process of developing educational aspirations and expectations. Education is seen as an intervening factor between people and employment and has been largely recognized as a primary vehicle in achieving social mobility. Several researchers have compiled extensive bibliographies consisting of works dealing with

educational aspirations and expectations. Kuvelsky and Reynolds (1966; 1970) and Ohlendorf and Kuvelsky (1966) have reviewed the literature and categorized studies addressing educational aspirations and expectations in topical areas of education, residence, income, and family orientations.

Heinsohn (1974:36) and Schwarweller (1974:464) have completed studies that indicate one-half or more high school seniors aspired to higher education. Campbell and Parsons (1972:412) reported that a majority of students perceive school as the primary vehicle as a means to achieving their vocational plans and exhibit a readiness for planning at an early age.

The correlation between a person's socioeconomic background and educational expectations has been the subject of many empirical studies. Sewell and Shah (1967:22-23) reported that children of higher status socioeconomic origins are more likely to aspire to high educational goals than are children of lower status socioeconomic backgrounds.

Gibbons and Lohnes (1966:66-70) reported that youths in higher income families expect to go to college, while students in lower income levels usually do not think in terms of college. Powell (1970:33) noted that the level of living or income of the student's family was directly and consistently related to the student's expected level of education.

Havighurst (1962:107-108) found that students from low socioeconomic status were more likely to have unsuccessful school careers and to drop out of school before graduating. Coster (1959:62) reported that high school pupils from higher socioeconomic strata are more likely than those from middle and lower status homes to continue their education. Rehberg and Westby (1967:362; 374) suggested that the educational level an individual attains is one of the most important determinants of his occupational level, with both educational and occupational achievements being major determinants of the family social status. Kerckhoff and Campbell (1977:25) found that socioeconomic status is a much more significant source of influence for whites than blacks.

Social goals and values are transmitted to the young through the process of socialization. Kohn (1959:344-345) reported data indicating that these transmitted goals and values are greatly influenced by the level of education, occupation and status which the parents attain. Keller and Zavalloni (1964:60; 69-70) noted that parents in the middle and upper social strata generally transmit more positive attitudes and values toward educational and occupational achievement and social mobility. As a result, youth from middle and upper class families have to climb less distance on the "social ladder" to secure a higher education and prestigious occupational position than do those from lower class families.

Researchers have conducted studies which indicate that educational aspirations and expectations are related to parental influence and background. Rehberg and Westby (1967:362) reported that the proportion of adolescents expressing an expectation to enroll in a four-year college or university varies, positively with the occupational level of the parents, positively with the intensity of parental educational pressure, stress, and encouragement and, negatively with size of family. Mondart, Curtis, and Dobbins (1970:52-55) noted a significant relationship between fathers' occupation and students' expected educational levels. Picou and others (1972:10-11) found that the levels of fathers' occupations were a more powerful predictor of the educational plans of white women than black women.

Smith and Jilcoa (1971:15; 24) suggested that the occupational characteristics of parents tended to influence the educational aspirations and expectations of children. Banduice (1967:263; 267) found a trend for youths whose mothers were employed to have higher educational aspirations and expectations than youths whose mothers were not employed. The study also indicated that children of employed mothers in the lower socioeconomic levels expected to complete more education than children of unemployed mothers in the lower socioeconomic levels. Krauss (1964:867) found high occupational status within the working class to be associated with college aspirations in the offspring. Forty-seven percent of the students whose fathers were craftsmen or

foremen planned to attend college, in contrast to 36 percent whose fathers were employed in semi-skilled, service, or labor occupations. This relationship was strongest when the father completed high school.

In a study entitled Seventy-Five Thousand Seniors (1970:38-39), researchers reported that seniors with parents employed in the professional levels were more likely to attend college full time than any other group. The researchers reported that two-thirds of the seniors planning vocational training came from homes where parents' employment was in the skilled, semi-skilled, or unskilled occupations.

Other studies have investigated the relationship between the educational attainments of parents and youths' educational aspirations and expectations. Lee, Ray, Vetter and others (1971:18) concluded that plans for increasing amounts of education were significantly related to higher educational achievement of both parents. Smith and Jilcoa (1971:14-15) reported that while the educational expectations of youths were similar to the educational achievement of parents, the educational aspirations tended to exceed the educational achievement of parents. Gribbons and Lohnes (1966:69) found that most of the students in their study aspired to educational goals at the same level or a level above the educational attainment of their parents.

Mondart, Curtis, and Dobbins (1970:59; 114-115) concluded that expected educational levels of students were highly influenced by parents' educational levels. Parents of seniors who attended college

were more likely to have more formal education than the parents of seniors who did not plan to attend college. Uzell (1961:202-209) reported that black high school seniors in North Carolina who aspired to higher educational levels had parents whose educational and occupational status was somewhat higher than parents of respondents who aspired lowest. Sewell and Shah (1968:209) found both fathers' and mothers' educational achievement are positively and significantly related to college plans, college attendance, and college graduation.

Hatfield (1976:113-116) reported in a study of young women in the South that parents' education exerted significant influences on the respondents' educational and occupational aspirations. Salter and Falk (1978:29-31) surveyed young white women in the rural South and reported that mothers' education had a greater effect on the educational and occupational orientations of the respondents than fathers' education.

The effect of ethnicity on the educational aspirations and expectations of youth has been widely investigated. Moerk (1974:295) found the educational aspirations of white, black, and Mexican-American males high for all three groups. Kuvelsky and Monk (1975:31) found that non-metropolitan teenage Mexican-American youth maintained a relatively high level of mobility aspirations and expectations between 1967 and 1973.

Larson (1971:11-15) found in a study of American Indian and white students in Montana that fathers in high income groups were reported to

have put more pressure on students' educational expectations, whereas mothers from low income families applied more pressure than fathers. In a similar study, Larson (1971:1-5) noted that female students were more likely to choose mothers and male students were more likely to choose fathers as the persons exerting the most influence on students' educational expectations. He concluded that socioeconomic status exerted a greater influence than ethnicity in students' educational expectations.

DeHoyos studied 439 Pima students in grades seven through twelve (1971:49-53). She reported that educational aspirations are especially high, whereas occupational aspirations are somewhat lower.

Sherarts and others surveyed parents of Menominee students in Minnesota (1972:16-17). They found (1972:117) that 83 percent of the parents placed a high value on formal education. Nearly all the respondents (97 percent) appeared to have given consideration to the educational needs of their children.

Selinger (1970:77-80) investigated what happened to American Indian students following high school graduation, as well as characteristics of the graduates and how the graduates viewed the impact of their educational experiences on their post high school careers. His sample consisted of 287 high school graduates of the class of 1962 from schools in Oregon, Washington, Idaho, Montana, North Dakota, and South Dakota. He found that about 70 percent of the students continued into

academic or training programs following high school graduation, and that about half of the graduates who entered post high school programs completed them. Of these, the large majority completed technical-vocational rather than academic programs, with many students failing to complete the programs they initially entered. Of the sample, there were no graduates or potential graduates in the field of medicine.

Kleinfeld and Kohout (1974:27-31) studied all Indian, Eskimo, and Aluet students who enrolled for the first time in an academic program at the University of Alaska at Fairbanks from 1968-72. They found that the college success of these students markedly increased, particularly for Natives with low and medium academic performance, and that a main reason for this increase was due to the Special Services Program with its emphasis on transitional and academic skills development courses.

The effect of a person's sex and grade level on educational expectations has been the subject of empirical studies. In a survey of rural Kentucky high school seniors, Bogie (1976:16) reported that high proportions of both sexes aspired to attend college and about as many males as females expected to enter college. Picou and Howard (1976:7-8) found support for the general theme of sex-role stereotyping and indicated that males received more college encouragement and achievement training from parents than females. Kelley and Wingrove (1975:54-55) reported that black males were consistently below whites and black females in educational expectations; black females, with the exception of ninth

graders, were consistently equal or above whites in educational expectations.

Boyd (1970:4-5) investigated the educational aspirations of sophomore and senior males and females in South Carolina. Her findings indicated small differences between the educational aspirations of students as sophomores and as seniors. There was an increase in the educational aspirations for males and a decrease for females between the sophomore and senior years. A higher proportion of white students than non-white students reported the same level of educational aspiration during their sophomore and senior years.

Edington (1975:36-37) surveyed the educational expectations of American Indian, white and Mexican-American males and females in New Mexico. He found significant differences related to grade level and sex by ethnic group interaction. Seniors expected more education than did sophomores and American Indian males expected less education than did Indian females or white males.

This section of the chapter has been a review of the literature as it relates to the educational expectations of youth. There are many factors affecting postsecondary educational projections of young people. Those addressed included socioeconomic status, occupation and education of parents, ethnicity, sex and grade level. The next section addresses the academic achievement of American Indian students.

Socioeconomic Status, Educational Attainment
and American Indian Students

Studies reviewed in the previous sections of this chapter indicated that educational and occupational expectations are positively correlated with socioeconomic status, including parents' education, parents' occupation, and family income. Successful academic achievement has been viewed as a means to further educational attainment and, subsequently, to better employment and career opportunities. The purpose of this section is to review the educational attainment of American Indian youth as it relates to socioeconomic status.

Berry (1968) and Edington (1969) compiled extensive bibliographies on recent works concerning the educational attainment of American Indian youth. These bibliographies were divided into different categories, including socioeconomic status and educational achievement of Indian youth.

The United States Commission on Civil Rights (1978:5-93) issued a report entitled, Social Indicators of Equality for Minorities and Women in August 1978. The report indicated the following:

1. In 1976 the high school non-attendance ratio for American Indian and Alaska Native males was 2.80 times greater than the ratio for majority males and 3.0 times greater for American Indian and Alaska Native females than majority males;
2. In 1976 the high school completion ratio for American Indian and Alaska Native males was 20 percent below the completion ratio for majority males; for American Indian

and Alaska Native females, the completion ratio was 33 percent below the completion ratio of majority males.

3. In 1976, the college completion ratio for American Indian and Alaska Native males was 76 percent below the ratio for majority males; the college completion ratio of American Indian and Alaska Native females was 88 percent below the college completion ratio of majority males;

The U.S. Civil Rights Commission developed the term "occupational overqualification" as one indicator of social inequality and phrased it as follows: "for the same job or for jobs with similar skills or educational requirements, do most minorities and women demonstrate greater skill or more educational accomplishments of majority males?" In response to this, the report continued:

4. In 1976 the high school overqualification rate for American Indian and Alaska Native males was 37 percent higher than the ratio for majority males and 20 percent higher for Alaska Natives and American Indian females;
5. In 1976 the college overqualification ratio for American Indian and Alaska Native males was 16 percent higher than the ratio for majority males and 4 percent higher for American Indian and Alaska Native females;
6. In 1975 American Indian and Alaska Native males with four or more years of college earned 77 percent of the average dollars for majority males with the same educational attainment; and American Indian and Alaska Native females earned 63 percent of the average dollars for majority males with the same educational attainment;
7. In 1976 the American Indian and Alaska Native male unemployed ratio was 2.07 times as high as the ratio of majority males; for American Indian and Alaska females the unemployment ratio was 2.64 times as high as the ratio of majority males;

8. In 1976 American Indian and Alaska Native male teenage unemployment rate was 5.92 times the majority male total unemployment rate; for American Indian and Alaska Native female, the teenage unemployment rate was 6.1 times higher.

Havighurst (1970:67) noted that it is generally known that Indian children do not achieve as well on tests of school achievement as do the children of the white majority. He cited several studies that show that Indian children score about the same as white children in mental alertness and basic mental development. He noted, however, that Indian children do not achieve as well in school as do white children. He suggested that differences in family background account for more variations in school achievement than do differences in school characteristics, but that achievement of Indian students depends more upon school factors than does achievement of non-Indian students.

Kayser researched (1963:27-30) the scholastic performance of 207 southern Ute Indians in grades seven through twelve. She found that Ute graduates of the high school class of 1963 ranked proportionately lower than their Spanish and Anglo classmates in scholastic achievement. Kayser suggested that the higher performance of Anglo children beginning with the sixth grade may be explained by their ethnicity in that college attendance is a more realizable goal for them and this, plus the necessity for achieving scholastically if they are to do, forms a stronger motivation for higher scholastic performance in the secondary grades.

Kersey and Greene (1972:26-27) studied the educational achievement of Seminole Indian children from the Brighton, Hollywood, and Big Cypress reservations in Florida. They found that Seminole children as a group fell substantially below the national norms on the Wide Range Achievement Tests. They indicated that the achievement of the Indian children correlated closely with the acculturational level of their reservation group, with the more acculturated groups achieving greater educational success.

Havighurst (1970:12-13) found in a study of the achievement of American Indian children that Indian pupils follow a pattern of other low-income and non-English speaking children: the children drop behind the national norms of achievement almost from the start of school.

Selinger (1968:129-133) compiled a statistical report on the progress and dropouts of Indian students in grade eight from 1962 through 1967 in Oregon, Washington, Idaho, Montana, North Dakota, and South Dakota. The five year average for dropouts per state was: Oregon - 29.3 percent; Washington - 38.5 percent; Idaho - 34.4 percent; Montana - 41.7 percent; North Dakota - 51.5 percent; South Dakota - 57.8 percent. The total was 399 dropouts in a total number of 840 students or 47.7 percent (1968:137). His data demonstrated that Indian graduates of BIA schools were less likely to enter college than graduates of public schools and that the completion rates for vocational-technical programs were lower for graduates of BIA schools than for

public school graduates. However, in his study, he indicated that completion rates for college and junior college were higher for graduates of BIA schools.

In a study similar to Selinger's completed in the Southwest, Bass (1969:10-18) sampled Indian students who graduated from high school in 1962 from schools in New Mexico, Oklahoma, Southern Colorado, and Southern Utah. His study revealed that over half of all Indian high school graduates sampled completed a post-high school program, although not necessarily the program which they began. Of those who continued in post-high school programs, one in three completed vocational-technical programs. Less than 10 percent completed either two or four year colleges. Family background proved to be one of the most important characteristics differentiating Indians who continued their education from those who did not. The higher the level of parental education, the more likely the graduate was to continue his schooling.

Patton and Edington identified (1973:20-21) factors which were related to Indian student persistence in higher education at the University of New Mexico and New Mexico State University from 1967 to 1971. Those factors which showed significantly at New Mexico State University and not the University of New Mexico were sex, Indian Club membership, age, and high school: 62 percent of the persisters were members of the campus Indian Club, while only 44 percent of the non-persisters were members; 41 percent of the persisters were female; while

23.5 percent of the non-persisters were female; the mean age of the persisters was less than non-persisters when combined with G.P.A. Factors related to persistence at the University of New Mexico were type of high school, ACT score in social science, ACT score in math, major of technology and high school size.

McGrath and others surveyed (1965:2-9) Indian students attending colleges and universities in Arizona, Colorado, New Mexico and Utah during the period of 1958-62. Included in their survey were interviews with tribal leaders. The three major reasons for college dropouts as identified by southwestern tribal leaders were: financial reasons, lack of encouragement from family and tribal leaders to stay in school, and inadequate preparation.

Voyich (1974:62-80) completed a study of selected characteristics of successful and unsuccessful American Indian students enrolled at Montana State University from September, 1967 to June 1972. He reported that ten variables had a significant effect on student achievement: age, blood quantum, number of living children in family, American Indian Club attendance, marital status, number of credits carried, result of the American Council on Education Psychological Examination for College Freshman, result of the Cooperative School and College Ability Tests, result of the Ohio State University Psychological Test, and high school grade point average. Students who were older (23 years and above), had less Indian blood quantum, had fewer number of younger brothers or

sisters (4.38 compared to 5.37), were married, scored higher on achievement tests and had higher grade point averages in high school, tended to be "more successful."

Hildebrand (1974:38; 1975:36) and Pierce (1976:37; 1977:35) reported the following data regarding Indian students participating in the Bureau of Indian Affairs Higher Education Program for fiscal years 1973-1976, for the entire United States and the Billings area office which serves Montana and Wyoming (data for 1975 is not available):

Fiscal Year	Area	Total No. of Students	Number Undergraduate Students	Number Graduate Students	Undergrad Students Earning Degrees	Graduate Students Earning Degrees
1973	All Areas	13,558	13,069	489	770	168
1973	Billings Area	932	911	21	52	3
1974	All Areas	13,895	13,374	521	1,141	226
1974	Billings Area	975	975	0	48	0
1975	NA	NA	NA	NA	NA	NA
1975	NA	NA	NA	NA	NA	NA
1976	All Areas	18,680	17,661	1,019	1,398	279
1976	Billings Area	1,244	1,194	50	55	5

Canan reported the following data concerning Indian students from Montana and Wyoming who were enrolled in colleges and universities (1973; 1974; 1975; 1976):

1. 1973: 932 students enrolled, 491 first time and 441 continuing with 518 freshmen, 228 sophomores, 105 juniors, 60 seniors and 21 graduate students. Of this total, 151 were on academic probation and 202 students dropped out for the following reasons: 62 with academic problems, 64 for social reasons, 4 for financial reasons, 6 entered the military service, 11 were married, 8 entered vocational training, 12 accepted employment and 35 dropped out for other reasons (1973:1-3).
2. 1974: 975 students enrolled, 425 first-time and 550 continuing with 479 freshmen, 262 sophomores, 147 juniors, 73 seniors and 14 graduate students. Of this total, 87 were on academic probation and 206 dropped out for the following reasons: 62 with academic problems, 76 for social reasons, 13 for financial reasons, 5 entered the military service, 3 were married, 4 entered vocational training, 17 accepted employment and 26 dropped out for other reasons (1974:1-3).
3. 1975: 1,339 students enrolled full time, 15 part-time and 77 summer students with 712 freshmen, 311 sophomores, 194 juniors, 12 seniors and 40 graduate students; of this number, 256 dropped out for the following reasons: 88 with academic problems, 69 for social reasons, 20 for financial reasons, 2 entered the military service, 3 were married, 6 entered vocational training, 27 accepted other employment and 41 dropped out for other reasons. The following age breakdowns were noted: in the 18-24 age bracket, there were 782 students, while there were 557 students in the over-25 age bracket (1975:1).
4. 1976: 1,342 students enrolled, 550 first-time and 792 continuing with 753 freshmen, 359 dropped for the following reasons: 147 with academic problems, 114 for social reasons, 11 for financial reasons, 3 entered the military service, 15 were married, 4 entered vocational training, 18 accepted employment and 47 dropped out for other reasons (1976:1).

This section of the chapter has been a review of the literature relating to the educational attainment of American Indian youth,

particularly as related to socioeconomic status. The final section focuses on American Indian education on the Flathead Reservation.

Educational Attainment and the Flathead
Indian Reservation

This section presents demographic data describing the Indian people of the Flathead Reservation with respect to population, income, education and occupation. In addition, a review of the literature addressing the education of Indian and white students on the Flathead Reservation is presented.

The Overall Economic Development Plan of the Confederated Salish and Kootenai Tribes contains the following demographic data (1974:2-31) pertaining to residents of the Flathead Reservation:

1. The Flathead Indian Reservation area is composed of a total population of 18,500, of which approximately 3,500 are of Indian descent. Of that figure, 3,010 are enrolled members of the Confederated Salish and Kootenai Tribes of the Flathead Reservation. Using approximate figures, the population of the five largest towns in the area are, Ronan (3,000), Polson (4,200), Arlee (600), St. Ignatius (1,009) and Hot Springs (650).
2. The agricultural lands of the valley and commercial enterprises of the towns are principally non-Indian owned. The non-Indian population predominates in the principal towns of the reservation, Polson, Ronan, Charlo, and Hot Springs. In and about the small town of Elmo and other nearby small towns, the vast majority of Indians are of Kootenai descent. These individuals suffer greater economic hardships than other Indians on the reservation, and live in greater poverty. Hardship and poverty are relative matters, and a very few of the tribal members have attained economic or wage security. There is less

integration with the non-Indian community in and about Elmo than anywhere else on the reservation and employment there, as in other locations, is a serious problem which, at times, appears to defy solution.

3. The Indian population is considerably younger than the white population. One-half the Indian population is under 18 years old, while one-half of the white population is under 34 years old.
4. The Indian birth rate is considerably higher than the white birth rate.
5. Not only is the major part of the population young, but many are leaving the reservation as young adults and not returning. Adequate opportunities on which to build a satisfying future are not available to them on the reservation.

The following delineates the employment distribution of Indian people on the Flathead Reservation, as reported by Lucas (1974:76-77) in the Profile of the Montana Native American: (1) professional, technical and kindred workers: male, 4.4 percent, female, 5.0 percent; (2) managers and administrators, except farm: male, 9.1 percent, female, 5.0 percent; (3) sales workers: male, 1 percent, female, 4.0 percent; (4) clerical and kindred workers: male, 4.4 percent, female, 31.7 percent; (5) craftsmen, foremen and kindred workers: male, 16.5 percent, no females reported; (6) operatives, including transport: male, 16.3 percent, female, 8.9 percent; (7) laborers, except farm: male, 16.3 percent, no females reported; (8) farmers and farm managers: male, 8.1 percent, female, 3.0 percent; (9) farm laborers and foremen: male, 19.8 percent, female, 8.4 percent; (10) service workers, except

private household: male, 49 percent, female, 31.7 percent; (11) private household workers: no males reported, female, 2.5 percent

The following delineates the annual income of Indian families on the Flathead Reservation in comparison to all Montana families (Lucas, 1974:98-99): (1) under \$7,000: Indian families 67.6 percent, all Montana families 37.1 percent; (2) \$7,000 to \$14,999: Indian families 29.3 percent, all Montana families 49.2 percent; (3) above \$15,000: Indian families 3 percent, all Montana families 13.6 percent. The mean annual income for Flathead Reservation families in 1970 was \$5,667 compared to \$9,605 for all Montana families. All Montana families below the poverty level totaled 10.4 percent, compared to 32.4 percent of the Flathead families (Lucas, 1974:100).

With regard to education, Lucas (1974:130-131) reported the following regarding persons twenty-five or older: (1) 29.9 percent of Flathead Reservation members were high school graduates compared to 59.9 percent of all Montana residents; (2) all Montana residents with one to three years of college totaled 19.1 percent compared to 6.7 percent of the Flathead population; (3) eleven percent of all Montana residents had four or more years of college compared to 2 percent of the Flathead population.

A few researchers have studied the educational achievement of Indian and white students on the Flathead Reservation. Marble (1937: 57-59) studied the academic achievement of Salish and white children.

She found that Salish children were behind white children in achievement, but that the difference was small, although the Salish pupils were usually one year or more older than the white pupils in the same grade.

Dooohan studied (1957:2) the attitudes and opinions of the pupils, parents and teachers of St. Ignatius High School to determine their satisfaction or dissatisfaction with the high school. His findings included the following (1957:45-46):

Over half the parents thought that their children were getting less than they could from their school work and they indicated that a lack of effort on the part of the pupils and not enough individual help by the teacher were the two principle reasons for this. Most of the pupils thought they they were getting less than they could out of their school work. Those who thought they were studying some things that would not be useful listed English, history and algebra. All of the teachers expressed the opinion that the pupils were not getting all that they could out of their school work.

Bervon completed a study of the history of Indian education on the Flathead Reservation (1959:23-26). She noted that until a few years before 1959, educational emphasis had been on the alternative of finishing the eighth grade or staying in school until the age of sixteen. She stated that "in the last few years Indian students have been encouraged to attend and graduate from high school and then go on with either vocational or academic work beyond the high school" (1959:41). Bervon cited statistics compiled by the Bureau of Indian Affairs (1959:64-65) which documented the progress of Indian high school and college

students from the Flathead Reservation. The study was completed for those born in 1905 to those born in 1935. By 1955 this group had 523 high school graduates, 21 college graduates, and there were 88 who had attended college but had not graduated. White (1964:1-6) noted in a 1964 study that out of a total of 265 Indian students enrolled in high school, 30 dropped out and 30 graduated during the 1963-64 school year.

Lang (1965:35) studied 163 Indian and white children on the Flathead Reservation to determine cultural and personality characteristics of both groups. He concluded that (1965:111-112):

The 'typical' Flathead child is friendly, industrious, and highly intelligent. However, he often lacks a sense of identity which probably results from the conflict encountered between his 'feelings for the past,' and the exigencies of living under the auspices of a dominant culture that makes every attempt to standardize all things at the expense of individuality. Yet the Flathead child realizes that he is different and seeks recognition of this fact by those of the dominant culture; herein lies the crux of the mental conflict he is now experiencing. Indeed, we must imagine that the 'typical' Flathead child often asks himself, "Who am I, and what will the past do for me now?"

The 'typical' white child is also friendly, industrious, and highly intelligent. But unlike his Indian neighbor, he possesses more confidence in himself as well as in his cultural norms and traditions. In short, he does not have to be concerned with adjusting to the ways of another culture. The white child is in the enviable position of having been born into the dominant culture--and he is well aware of this.

Brockman reported (1970:26-31) that distinctions between the social classes with respect to educational level of Indian tribal members on

the Flathead Reservation are not statistically significant, with the exception of Class IV which is described as:

Eighty percent are half (blood quantum) Indian; a mean annual income of \$2,200; only 15 percent were gainfully employed; the family situation was described as 'unstable'; mean educational level of men was 4.9 years and women 5.3 years; very little voluntary association with whites. Classes I, II, and III in ascending order, exhibit: more Indian look; lower income; lower-levels of skills related to employment; increasing family instability; less voluntary contact with whites and lower educational level of both men and women.

Brockman did not obtain drop-out figures by social classes, but noted that for classes I through IV, the percentage of all currently enrolled students who were behind one or more years in grade level vis-a-vis age in school was 17.4, 18.5, 33.0 and 32.5, respectively. He carefully stipulated that in the local status system and in the local employment market a high degree of education was not required (1970:28):

In fact, except for a few professionals and Bureau of Indian Affairs specialists, there is little demand for highly educated people on the reservation. On the whole, the highly educated have to leave the reservation--and many do. Of the on-reservation Indian population, 13.95 percent were 15-19 years old, while the percentage in the 20-24 age bracket was 9.37 percent. The people do not return permanently in any statistically detectable numbers at a later age.

Brockman suggested in the community in which the child is raised, the young school-age Indian student saw no great immediate advantage of staying in school past the legal requirement of sixteen years of age, and, that by the time a student was in high school, he or she has had all the education needed for the great majority of jobs on the

reservation. As such, the economic environment of the reservation does not select for more education than the legal requirement of being in school until sixteen years of age:

This lack of economic pressure to complete high school is coupled with a selected factor to leave school. The latter pressure is the discriminatory situation in the schools that is recognized by a large proportion, though, significantly, not by all Indian children and parents (1970:29).

Brockman stated in his study that the prejudice Indians face on the reservation, particularly in Classes III and IV, is likely to lead to a lowered self-concept and that for the lower class children, the subtle discrimination on the part of the teacher and other students is likely to lead to a self-fulfilling prophesy situation. He concluded that the patterns of discrimination towards Indians "do not select for Indian children, particularly those in the lower classes, staying in school through high school."

Fenton reported the following data concerning members of the Confederated Salish and Kootenai Tribes enrolled in colleges and universities from 1973-77:

1. 1973: 36 students enrolled, 7 first time, 29 continuing with 12 freshmen, 13 sophomores, 4 juniors, 6 seniors, and 1 graduate. Of this total, none were on academic probation and seven dropped out for the following reasons: 1 with academic problems; 1 for social reasons, 2 for marriage; 1 accepted employment and 2 for other reasons (1973:1-3).
2. 1974: 61 students enrolled, 30 first time, 30 continuing with 26 freshmen, 26 sophomores, 3 juniors, 6 seniors, and no graduate students. Of this total, 3 were on

academic probation and 20 dropped out for the following reasons: 5 with academic problems, 1 for social reasons, 3 for financial reasons, 1 was married and 10 dropped out for other reasons (1974:1-3).

3. 1975: 79 students enrolled, 39 first time, 40 continuing with 41 freshmen, 20 sophomores, 11 juniors, 4 seniors and 3 graduate students. Of this total, 19 dropped out for the following reasons: 5 with academic problems, 9 for social reasons, 2 for financial reasons, 1 entered the military service and 2 dropped out for other reasons. The following age breakdowns were noted: in the 18-24 age bracket there were 46 students while there were 33 students in the over 25 age bracket (1975:1).
4. 1976: 111 students enrolled, 59 first time and 52 continuing with 65 freshmen, 15 sophomores, 16 juniors, 11 seniors, and 4 graduates. Of this total, 27 dropped out for the following reasons: 1 with academic problems, 16 for social and personal reasons, 2 for financial reasons, 1 entered the service, 2 accepted employment and 5 dropped out for other reasons. The following age breakdowns were noted: in the 18-24 age bracket there were 76 students while there were 31 students in the over 25 age bracket (1976:1).
5. 1977: 87 students enrolled, 46 first time and 41 continuing with 44 freshmen, 13 sophomores, 13 juniors, 13 seniors and 4 graduates. Of this total, 25 dropped out for the following reasons: 8 with academic problems, 2 for social reasons, 1 for financial reasons, 1 for marriage, 3 accepted employment and 8 dropped out for other reasons. The following age breakdowns were noted: in the 18-24 age bracket, there were 42 students while there were 45 students in the over 25 age bracket (1977:1).

Lozar (1976:1) conducted a reservation-wide employment survey on the Flathead Reservation in 1976 in an effort to compile data that would facilitate and enhance the effectiveness of the Employment Assistance Program of the Human Resources Development Department of the

Confederated Salish and Kootenai Tribes. Questionnaires were administered to 1,934 tribal members, between the ages of 16 and 60, with 1,799 responding, or a 93 percent return. In addition, 214 businesses were surveyed. He reported the following (1976:6-11):

1. Of 214 businesses surveyed, 83 answered 'yes,' 89 answered 'no' and 42 were 'undecided' on the following question: Would your firm participate in an on-the-job vocational training program with the local schools?
2. Tribal members responding to the questionnaire indicated they were employed in the following fields:

<u>Career Field</u>	<u>Number Employed</u>	<u>Career Field</u>	<u>Number Employed</u>
Agriculture	152	Logging	59
Automotive	64	Miscellaneous	143
Bars	26	Office	221
Construction	206	Personal Services	13
Education	40	Public Services	155
Food Services	68	Recreation-Tourism	9
Forestry	124	Sales	26
General Labor	199	Travel-Communications	48
Government	59	Tribal Business	119
Health Services	68		

3. Employment statistics tallied as follows: Total reservation tribal members unemployed: 54.3 percent; employed: 45.7 percent. Breakdown by sex indicated the following: male employed 60.9 percent; female employed 44.4 percent; male unemployed 36.1 percent; female unemployed 55.6 percent; students employed 17.8 percent; students unemployed 82.2 percent..

McDonald and Berg (1976:23-34) conducted a survey of 154 Indians residing on the Flathead Reservation to assess current demographic and interest data to determine the learning experiences which could be made available to reservation residents though Salish Kootenai Community

College in cooperation with Flathead Valley Community College. Over half (53 percent) of the adult respondents indicated that they were high school graduates, while 42 percent indicated some postsecondary education. Only 13 percent were college graduates. The educational interest of the adult respondents was as follows (percentages exceed 100 percent due to multiple responses): (1) community college courses, 38 percent; (2) community college degrees, 21 percent; (3) vocational training, 42 percent; (4) special interest courses, 43 percent; (5) adult basic education, 21 percent.

This section has been a review of the literature of Indian education on the Flathead Indian Reservation. The review included a presentation of demographic data of Indian residents of the reservation, including educational, occupational and income information. Findings of empirical studies addressing the education of Indian and white students were reviewed and presented for purposes of comparison to findings of empirical studies reported in previous sections of this chapter.

Chapter III

PROCEDURES

The purpose of this study was to determine whether a significant relationship existed between the educational and occupational expectations of American Indian and white students attending high schools on the Flathead Reservation with respect to sex, grade level in school, amount of parents' formal education, category of parents' occupation, and level of family income. This chapter contains a description of the population, methods of collecting data, method of organizing data, hypotheses, statistical methods of analysis, precautions for accuracy and summary.

Population

The population for this study consisted of those male and female Indian and white students in the tenth and twelfth grades attending the following high schools on the Flathead Indian Reservation the day the questionnaire was administered: Arlee, Charlo, Hot Springs, Polson, Ronan, St. Ignatius, and Two Eagle River School. The total number surveyed was 526 students. Of this number 108 were Indian and 418 were white, 255 were females and 271 were males, 289 were sophomores and 237 were seniors. Since this study was concerned with the total population of sophomore and senior students attending high schools on the

Flathead Reservation the day the questionnaire was administered, no sampling techniques were required.

Method of Collecting Data

A pupil background questionnaire was administered on a group interview basis to collect essential data about the expressed educational and occupational expectations of the students. The questionnaire provided for the collection of data regarding students' ethnic background, sex, grade level, amount of parents' education, category of parents' occupation and family income.

A panel of experts consisting of both Indian and non-Indian educators reviewed the questionnaire and recommended changes. When this was completed, a field test was administered to measure the reliability of the questionnaire. After this procedure was completed, the questionnaire was administered to the population under study by this researcher in cooperation with the officials of the seven high schools and the Tribal Education Committee of the Confederated Salish and Kootenai Tribes of the Flathead Reservation. Respondents were asked to answer all the questions they could, but were instructed that they were not required to answer any questions they did not want to.

Method of Organizing Data

A modification of Hollingshead's educational scale was used to classify students' educational expectations. The modified scale includes the following (1957:50):

1. Graduate-Professional Training: persons who expected to undertake graduate or professional studies;
2. Standard College or University Graduation: persons who expected to complete a four-year college or university program;
3. Partial Four-Year College Training: persons who expected to attend but not graduate from a four year college;
4. Partial or Complete Two Year College or Vocational School: persons who expected to attend or graduate from a two year college or vocational school;
5. High School Graduates: persons who expected to graduate from high school;
6. Partial High School: persons who did not expect to graduate from high school.

Respondents were asked to identify one of the above categories to which they expected to belong. After this procedure was carried out, the first two responses were designated "high", the next two responses

were designated "medium" and the last two responses were designated "low" for purposes of analysis.

To identify occupational expectations, respondents were asked to list the occupation they expected to enter after completing their education. These responses were categorized according to the North-Hatt ranking of occupations. The North-Hatt ranking of occupations has been widely accepted as affirming a rank structure of the prestige status of occupations (Reiss, 1961:7). The North-Hatt scale lists ninety occupations in rank order from the most prestigious to the least prestigious. For purposes of analysis, the North-Hatt scale was divided into three categories: The first thirty occupations were designated "high", the next thirty were categorized "medium" and the last thirty were designated "low". Those occupations not assigned scores on the North-Hatt scale were assigned one of the three above categories based on respective North-Hatt scale values delineated by the Socioeconomic Index for Occupations in the Detailed Classification of the Bureau of the Census (Reiss, 1961:263-275).

Amount of parents' education was classified according to the above modification of Hollingshead's scale with the addition of a seventh category, i.e., completed nine grades or less. After respondents indicated amount of fathers' and mothers' education, the first three responses were designated "high" and the last four responses were designated "low" for purposes of analysis. Types of parents'

occupations were classified according to the North-Hatt scale, using the same procedure delineated above.

Annual family income was categorized according to the income groups delineated by the U.S. Bureau of the Census. Those categories are: (1) under \$1,000; (2) \$1,000 to \$2,999; (3) \$3,000 to \$4,999; (4) \$5,000 to \$6,999; (5) \$7,000 to \$9,999; (6) \$10,000 to \$14,999; (7) \$15,000 to \$24,999; (8) \$25,000 and above. The first four categories were collapsed and designated "low", the next two categories were collapsed and designated "medium" and the last two categories were collapsed and designated "high" for purposes of analysis.

Frequency distributions and corresponding percentage distributions of students' educational and occupational expectations were computed for ethnicity, sex, grade level, fathers' education, mothers' education, fathers' occupation, mothers' occupation, and family income. This information is presented on respective tables in Chapter IV.

Hypotheses

For the purposes of this study, the null hypotheses were as follows:

1. The educational expectations of male students are independent of ethnicity.
2. The educational expectations of female students are independent of ethnicity.

3. The educational expectations of Indian males are independent of grade level.
4. The educational expectations of white males are independent of grade level.
5. The educational expectations of Indian females are independent of grade level.
6. The educational expectations of white females are independent of grade level.
7. The educational expectations of Indian students are independent of sex.
8. The educational expectations of white students are independent of sex.
9. The educational expectations of Indian and white students are independent of amount of fathers' education.
10. The educational expectations of Indian and white students are independent of amount of mothers' education.
11. The educational expectations of Indian and white students are independent of category of fathers' occupation.
12. The educational expectations of Indian and white students are independent of category of mothers' occupation.
13. The educational expectations of Indian and white students are independent of family income.

14. The occupational expectations of male students are independent of ethnicity.
15. The occupational expectations of female students are independent of ethnicity.
16. The occupational expectations of Indian males are independent of grade level.
17. The occupational expectations of white males are independent of grade level.
18. The occupational expectations of Indian females are independent of grade level.
19. The occupational expectations of white females are independent of grade level.
20. The occupational expectations of Indian students are independent of grade level.
21. The occupational expectations of white students are independent of grade level.
22. The occupational expectations of Indian and white students are independent of amount of fathers' education.
23. The occupational expectations of Indian and white students are independent of amount of mothers' education.
24. The occupational expectations of Indian and white students are independent of category of fathers' occupation.

25. The occupational expectations of Indian and white students are independent of category of mothers' occupation.
26. The occupational expectations of Indian and white students are independent of family income.

Analysis of Data

All hypotheses in this study are tested utilizing chi square.

Chi square is a non-parametric statistic and deals with data that consists of the nominal classification type of measurement (Ferguson, 1971:174). Thus, this statistic was appropriate for testing the above stated hypotheses. The formula for chi square is

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

where O = observed frequency

E = expected or theoretical frequency

The statistical difference was considered to be significant at the .05 level of confidence. In general, the following steps were used to test the hypotheses:

1. The null hypothesis was stated.
2. The level of significance for this study was at the .05 level of confidence.
3. The test statistic (chi square) to be used was stated.

4. The critical value was stated were appropriate. These values were found by using appropriate tables for critical values of chi square at the specific level of confidence and appropriate number of degrees of freedom.
5. The statistics were computed.
6. The null hypotheses were retained or rejected by comparing the calculated values of the statistics to the critical value stated.

Precautions for Accuracy

All data were posted on the appropriate coding forms and taken to the Computer Center at Montana State University, key punched and verified. After this procedure was completed, the chi square program was run on the computer.

Summary

Past empirical studies have indicated correlations between students' background and their educational and occupational expectations. Very few of these studies have addressed American Indian youth. No studies, to this researcher's knowledge, of the nature of the one proposed herein have been undertaken in Montana or the Pacific Northwest. This study was conducted to investigate selected characteristics related to the educational and occupational expectations of Indian and

white students in the tenth and twelfth grades of high schools on the Flathead Reservation during the 1978-79 school year. The eight independent variables were: ethnicity, sex, grade level, fathers' education, mothers' education, fathers' occupation, mothers' occupation, and family income. The two dependent variables were educational expectations and occupational expectations. Data were obtained by administering questionnaires on a group interview basis and were coded and verified according to appropriate scales. The null hypotheses were tested utilizing chi square to determine whether a significant relationship existed between the dependent and independent variables. The level of significance was at the .05 level of confidence.

Chapter IV

ANALYSIS OF DATA

The purpose of this study was to determine whether a significant relationship existed between the educational and occupational expectations of students attending high schools on the Flathead Reservation with respect to ethnicity, sex, grade level, amount of parents' formal education, category of parents' occupation, and level of family income. The total population in this study consisted of 526 students attending high schools on the Flathead Reservation in northwestern Montana during the 1978-79 school year.

This chapter presents an analysis and interpretation of the data. The first section describes the relationship of eight independent variables and students' educational expectations. Section two describes the relationship of the same eight independent variables and students' occupational expectations. In order to determine the relationship of the eight independent variables with the two dependent variables, frequency and percentage distributions and chi square values were computed. Chi square values at the .05 level of confidence were considered significant. The order of data presentation follows the order of the research hypotheses.

Educational Expectations

Hypothesis 1: The educational expectations of male students are independent of ethnicity.

When data for the educational expectations of male students were analyzed for ethnicity, no significant differences were found between the educational expectations of Indian males and white males. The null hypothesis was retained as the computed chi square was .94. The frequency and percentage distribution and chi square analysis of the educational expectations of Indian and white males are presented in Table 1.

Table 1

Chi Square Analysis of Educational Expectations
of Males by Ethnicity

Educational Expectations	Males			
	Indian		White	
	No.	Percent	No.	Percent
Low	22	39	79	37
Medium	20	35	65	30
High	15	26	70	33
Total	57	100	214	100

$$\chi^2 = .94$$

$$df = 2$$

Critical Value of χ^2 at $\alpha .05$, $df = 2$ is 5.99.

Hypothesis 2: The educational expectations of female students are independent of ethnicity.

When data for the educational expectations of female students were analyzed for ethnicity, significant differences at the .05 level of confidence were found between the educational expectations of Indian females and white females. The null hypothesis was rejected as the computed chi square was 10.56. The frequency and percentage distributions and chi square analysis of the educational expectations of Indian and white females are presented in Table 2.

Table 2

Chi Square Analysis of Educational Expectations
of Females by Ethnicity

Educational Expectations	Females			
	Indian		White	
	No.	Percent	No.	Percent
Low	20	39	46	23
Medium	22	43	76	37
High	9	18	82	40
Total	51	100	204	100

$$X^2 = 10.56^*$$

$$df = 2$$

Critical Value of X^2 at $\alpha .05$, $df = 2$ is 5.99.

*Significant at the .05 level of confidence.

When data in Table 2 are viewed, the frequency and percentage distributions indicate that white female respondents expected to attain higher educational levels than Indian female respondents. Whereas 40 percent of the white females expected to attain a high level of education, only 18 percent of the Indian females expected to attain a similar level. In contrast, 82 percent of the Indian female respondents expected to attain low and medium levels of education, whereas 60 percent of the white female respondents expected to attain the same.

Hypothesis 3: The educational expectations of Indian males are independent of grade level.

When data for the educational expectations of Indian males were analyzed by grade level, significant differences at the .05 level of confidence were found between the educational expectations of Indian males in the sophomore and senior years of high school. The null hypothesis was rejected as the computed chi square was 6.28. The frequency and percentage distributions and chi square analysis of the educational expectations of male Indian sophomores and seniors are presented in Table 3.

When data in Table 3 are viewed, the frequency and percentage distributions indicate that Indian males in their senior year of high school expected to attain higher educational levels than Indian males in their sophomore year of high school. Whereas 38 percent of the seniors expected to attain a high level of education, only 16 percent

Table 3

Chi Square Analysis of Educational Expectations
of Indian Males by Grade Level

Educational Expectations	Indian Males			
	Sophomore		Senior	
	No.	Percent	No.	Percent
Low	11	35	11	42
Medium	15	48	5	19
High	5	16	10	38
Total	31	101*	26	99*

$$X^2 = 6.28^{**}$$

$$df = 2$$

Critical Value of X^2 at $\alpha .05$, $df = 2$ is 5.99.

*Less than or greater than 100% due to rounding of decimals.

**Significant at the .05 level of confidence.

of the sophomores expected to attain a high level of education. In contrast, 83 percent of the sophomores expected to attain a low or medium level education, and 61 percent of the seniors expected to attain the same.

Hypothesis 4: The educational expectations of white males are independent of grade level.

When data for the educational expectations of white males were analyzed by grade level, no significant differences were found between the educational expectations of white males in their sophomore year of high school and white males in their senior year of high school. The null hypothesis was retained as the computed chi square was 2.24. The

The frequency and percentage distributions and chi square analysis of the educational expectations of white male sophomores and seniors are presented in Table 4.

Table 4

Chi Square Analysis of Educational Expectations
of White Males by Grade Level

Educational Expectations	White Males			
	Sophomore		Senior	
	No.	Percent	No.	Percent
Low	42	37	27	27
Medium	39	34	26	36
High	33	29	37	37
Total	114	100	100	100

$$X^2 = 2.24$$

$$df = 2$$

Critical Value of X^2 at $\alpha .05$, $df = 2$ is 5.99.

Hypothesis 5: The educational expectations of Indian females are independent of grade level.

When data for the educational expectations of Indian females were analyzed by grade level, no significant differences were found between the educational expectations of Indian females in their sophomore year of high school and Indian females in their senior year of high school. The null hypothesis was retained as the computed chi square was .66. The frequency and percentage distributions and chi square analysis of

the educational expectations of female Indian sophomores and seniors are presented in Table 5.

Table 5

Chi Square Analysis of Educational Expectations
of Indian Females by Grade Level

Educational Expectations	Indian Females			
	Sophomore		Senior	
	No.	Percent	No.	Percent
Low	10	37	10	42
Medium	13	48	9	38
High	4	15	5	21
Total	27	100	24	101*

$$\chi^2 = .66$$

$$df = 2$$

Critical Value of χ^2 at $\alpha .05$, $df = 2$ is 5.99.

*Greater than 100% due to rounding of decimals.

Hypothesis 6: The educational expectations of white females are independent of grade level.

When data for the educational expectations of white females were analyzed by grade level, no significant differences were found between the educational expectations of white females in their sophomore year of high school and white females in their senior year of high school. The null hypothesis was retained as the computed chi square was 1.90. The frequency and percentage distributions and chi square analysis of

the educational expectations of white female sophomores and seniors are presented in Table 6.

Table 6

Chi Square Analysis of Educational Expectations
of White Females by Grade Level

Educational Expectations	White Females			
	Sophomore		Senior	
	No.	Percent	No.	Percent
Low	23	20	22	26
Medium	42	36	34	40
High	51	44	30	35
Total	116	100	86	101*

$$X^2 = 1.90$$

$$df = 2$$

Critical Value of X^2 at $\alpha .05$, $df = 2$ is 5.99.

*Greater than 100% due to rounding of decimals.

Hypothesis 7: The educational expectations of Indian students are independent of sex.

When data for the educational expectations of Indian students were analyzed by the sex of students, no significant differences were found between the educational expectations of Indian females and Indian males. The null hypothesis was retained as the computed chi square was 5.60. The frequency and percentage distributions and chi square analysis of the educational expectations of female and male Indian students are presented in Table 7.

Table 7

Chi Square Analysis of the Educational Expectations
of Indian Students by Sex of Student

Educational Expectations	Indian Students			
	Female		Male	
	No.	Percent	No.	Percent
Low	21	42	21	36
Medium	14	28	28	48
High	15	30	9	16
Total	50	100	58	100

$$X^2 = 5.60$$

$$df = 2$$

Critical Value of X^2 at $\alpha .05$, $df = 2$ is 5.99.

Hypothesis 8: The educational expectations of white students are independent of sex.

When data for the educational expectations of white students were analyzed by sex, no significant differences were found between the educational expectations of white females and white males. The null hypothesis was retained as the computed chi square was .69. The frequency and percentage distributions and chi square analysis of the educational expectations of female and male white students are presented in Table 8.

Table 8

Chi Square Analysis of Educational Expectations
of White Students by Sex of Student

Educational Expectations	White Students			
	Female		Male	
	No.	Percent	No.	Percent
Low	65	28	59	32
Medium	81	35	60	32
High	84	37	67	36
Total	230	100	186	100

$$X^2 = .69$$

$$df = 2$$

Critical Value of X^2 at $\alpha .05$, $df = 2$ is 5.99.

Hypothesis 9: The educational expectations of Indian and white students are independent of amount of fathers' education. In order to facilitate analysis of data for the educational expectations of Indian and white students by amount of fathers' education, hypothesis 9 was divided into two sub-hypotheses according to low and high amounts of fathers' education.

Hypothesis 9a: The educational expectations of Indian and white students are independent of low amount of fathers' education.

When data for the educational expectations of Indian and white students were analyzed by low amount of fathers' education, no significant differences were found between the educational expectations of Indian and white students. The null hypothesis was retained as the

computed chi square was 4.43. The frequency and percentage distributions and chi square analysis of the educational expectations of Indian and white students by low amount of fathers' education are presented in Table 9.

Table 9

Chi Square Analysis of Educational Expectations of Indian and White Students by Amount of Fathers' Education

Educational Expectations	Amount of Fathers' Education							
	Low				High			
	<u>Indian</u>		<u>White</u>		<u>Indian</u>		<u>White</u>	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Low	29	35	104	33	6	67	13	14
Medium	38	46	114	36	0	0	26	29
High	16	19	95	30	3	33	52	57
Total	83	100	313	99*	9	100	91	100

$$X^2 = 4.43$$

$$df = 2$$

*Less than 100% due to rounding of decimals.

Critical Value of X^2 at $\alpha .05$, $df = 2$ is 5.99.

$$X^2 = 15.24^{**}$$

$$df = 2$$

**Significant at the .05 level of confidence.

Hypothesis 9b: The educational expectations of Indian and white students are independent of high amount of fathers' education.

When data for the educational expectations of Indian and white students were analyzed by high amount of fathers' education, significant differences at the .05 level of confidence were found between the educational expectations of Indian and white students. The null

hypothesis was rejected as the computed chi square was 15.24. The frequency and percentage distributions and chi square analysis of the educational expectations of Indian and white students by high amount of fathers' education are presented in Table 9.

When data in Table 9 are viewed, the frequency and percentage distributions indicate that white students whose fathers had a high amount of education expected to attain a higher level of education than Indian students whose fathers had a high amount of education. Eighty-six percent (86%) of the white students whose fathers had a high amount of education expected to attain a medium or high amount of education compared to 33 percent of the Indian students whose fathers had a high amount of education. Whereas 57 percent of the white students whose fathers had a high amount of education expected to attain a high level of education, 33 percent of the Indian students whose fathers had a high amount of education expected to attain the same. Conversely, 67 percent of the Indian students whose fathers had a high amount of education expected to attain a low level of education, whereas 14 percent of the white students whose fathers had a high amount of education expected to attain the same.

Hypothesis 10: The educational expectations of Indian and white students are independent of amount of mothers' education. In order to facilitate analysis of data for the educational expectations of Indian and white students by amount of mothers' education, hypothesis 10 was

divided into two sub-hypotheses according to low and high amounts of mothers' education.

Hypothesis 10a: The educational expectations of Indian and white students are independent of low amount of mothers' education.

When data for the educational expectations of Indian and white students were analyzed by low amount of mothers' education, significant differences at the .05 level of confidence were found between the educational expectations of Indian and white students. The null hypothesis was rejected as the computed chi square was 6.26. The frequency and percentage distributions and chi square analysis of the educational expectations of Indian and white students by low amount of mothers' education are presented in Table 10.

When data in Table 10 are viewed, the frequency and percentage distributions indicate that white students whose mothers had a low amount of education expected to attain a higher level of education than Indian students whose mothers had a low amount of education. Whereas 64 percent of the white students whose mothers had a low amount of education expected to attain a medium or high level of education, 47 percent of the Indian students whose mothers had a low amount of education expected to attain similar levels of education. Whereas 31 percent of the white students expected to attain a high level of education, 23 percent of the Indian students expected to attain the same. In contrast, 53 percent of the Indian students whose mothers had a low amount of

Table 10

Chi Square Analysis of Educational Expectations of Indian
and White Students by Amount of Mothers' Education

Educational Expectations	Amount of Mothers' Education							
	Low				High			
	<u>Indian</u>		<u>White</u>		<u>Indian</u>		<u>White</u>	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Low	35	53	107	36	3	25	13	13
Medium	16	24	98	33	2	17	35	35
High	15	23	92	31	7	58	51	52
Total	66	100	297	100	12	100	99	100

$$X^2 = 6.26^*$$

$$df = 2$$

Critical Values of X^2 at $\alpha .05$, $df = 2$ is 5.99.

*Significant at .05 level of confidence.

$$X^2 = 2.26$$

$$df = 2$$

education expected to attain a low level of education, compared to 36 percent of the white students who expected to attain the same.

Hypothesis 10b: The educational expectations of Indian and white students are independent of high amount of mothers' education.

When data for the educational expectations of Indian and white students were analyzed by high amount of mothers' education, no significant differences were found between the educational expectations of Indian and white students. The null hypothesis was retained as the computed chi square was 2.26. The frequency and percentage distributions and chi square analysis of the educational expectations of Indian

and white students by high amount of mothers' education are presented in Table 10.

Hypothesis 11: The educational expectations of Indian and white students are independent of category of fathers' occupation. In order to facilitate analysis of data for the educational expectations of Indian and white students by category of fathers' occupation, hypothesis 11 was divided into three sub-hypotheses according to low, medium and high categories of fathers' occupation.

Hypothesis 11a: The educational expectations of Indian and white students are independent of fathers' occupation in the low category.

When data for the educational expectations of Indian and white students were analyzed by low category of fathers' occupation, no significant differences were found between the educational expectations of Indian and white students. The null hypothesis was retained as the computed chi square was .67. Frequency and percentage distributions and chi square analysis of the educational expectations of Indian and white students by low category of fathers' occupation are presented in Table 11a.

Hypothesis 11b: The educational expectations of Indian and white students are independent of fathers' occupation in the medium category.

When data for the educational expectations of Indian and white students were analyzed by medium category of fathers' occupation, no significant differences were found between the educational

Table 11a

Chi Square Analysis of Educational Expectations of Indian and White Students by Category of Fathers' Occupation

Educational Expectations	Category of Fathers' Occupation											
	Low				Medium				High			
	Indian		White		Indian		White		Indian		White	
	No	%	No	%	No	%	No	%	No	%	No	%
Low	26	46	51	40	7	27	61	26	3	0	0	0
Medium	19	33	43	34	14	54	80	34	1	33	6	27
High	12	21	33	26	5	19	94	40	2	67	16	73
Total	57	100	127	100	26	100	235	100	3	100	22	100

$$X^2 = .67$$

$$df = 2$$

$$X^2 = 5.22$$

$$df = 2$$

$$X^2 = 4.81$$

$$df = 2$$

Critical Value of X^2 at $\alpha .05$, $df = 2$ is 5.99.

expectations of Indian and white students. The null hypothesis was retained as the computed chi square was 5.22. Frequency and percentage distributions and chi square analysis of the educational expectations of Indian and white students by medium category of fathers' occupations are presented in Table 11a.

Hypothesis 11c: The educational expectations of Indian and white students are independent of fathers' occupation in the high category.

When data for the educational expectations of Indian and white students were analyzed by high category of fathers' occupation, no significant differences were found between the educational expectations of Indian and white students. The null hypothesis was retained as the

computed chi square was 4.81. Frequency and percentage distributions and chi square analysis of the educational expectations of Indian and white students by high category of fathers' occupation are presented in Table 11a.

Inasmuch as ethnicity was not found to be a significant variable in the educational expectations of Indian and white students as compared to categories of fathers' occupation, ethnicity as a variable was removed to determine if a significant relationship existed between the educational expectations of all students and categories of fathers' occupation. The hypothesis and analysis of data follow.

Hypothesis 11d: The educational expectations of all students are independent of fathers' occupation in all categories.

When data for the educational expectations of all students were analyzed by categories of fathers' occupation, significant differences at the .05 level of confidence were found among educational expectations of students whose fathers worked in low, medium and high category occupations. The null hypothesis was rejected as the computed chi square was 84.61. The frequency and percentage distributions and chi square analysis of the educational expectations of all students by category of fathers' occupation are presented in Table 11b.

Table 11b

Chi Square Analysis of Educational Expectations of All
Students by Categories of Fathers' Occupation

Educational Expectations	Category of Fathers' Occupation					
	Low		Medium		High	
	No.	Percent	No.	Percent	No.	Percent
Low	77	42	68	26	0	0
Medium	62	34	94	36	28	27
High	45	24	99	38	75	73
Total	184	100	261	100	103	100

$$X^2 = 84.61^*$$

$$df = 4$$

Critical Values of X^2 at $\alpha .05$, $df = 4$ is 9.49.

*Significant at the .05 level of confidence.

When data in Table 11b are viewed, the frequency and percentage distributions indicate that students whose fathers worked in higher category occupations expected to attain higher levels of education. Whereas 100 percent of the students whose fathers worked in a high category occupation expected to attain a medium or high amount of education, 79 percent of the students whose fathers worked in a medium category occupation and 58 percent of the students whose fathers worked in a low category occupation expected to attain the same; 73 percent of the students whose fathers worked in a high category occupation expected to attain a high level of education, compared to 38 percent of the students whose fathers worked in a medium category occupation and

24 percent of the students whose fathers worked in a low category occupation. In other words, 42 percent of the students whose fathers worked in a low category occupation expected to attain a low amount of education, compared to 26 percent of the students whose fathers worked in a medium category occupation and no students whose fathers worked in a high category occupation. Thus, category of fathers' occupation had a significant influence on the educational expectations of students when ethnicity was removed as a control variable.

Hypothesis 12: The educational expectations of Indian and white students are independent of category of mothers' occupation. In order to facilitate analysis of data for the educational expectations of Indian and white students by category of mothers' occupation, hypothesis 12 was divided into three sub-hypotheses according to low, medium and high categories of mothers' occupation.

Hypothesis 12a: The educational expectations of Indian and white students are independent of mothers' occupation in the low category.

When data for the educational expectations of Indian and white students were analyzed by low category of mothers' occupation, no significant differences were found between the educational expectations of Indian and white students. The null hypothesis was retained as the computed chi square was 4.13. Frequency and percentage distributions and chi square analysis of the educational expectations of Indian and

white students by low category of mothers' occupation are presented in Table 12a.

Table 12a

Chi Square Analysis of Educational Expectations of Indian and White Students by Category of Mothers' Occupation

Educational Expectations	Category of Mothers' Occupation									
	Low				Medium				High**	
	Indian		White		Indian		White		Indian	White
	No	%	No	%	No	%	No	%	No	%
Low	24	40	19	35	4	18	34	22	0	0
Medium	25	42	75	33	10	45	54	34	0	0
High	11	18	71	32	8	36	69	44	0	0
Total	60	100	225	100	22	99*	157	100	0	0

$$X^2 = 4.13$$

$$df = 2$$

*Less than 100% due to rounding of decimals.

$$X^2 = 1.03$$

$$df = 2$$

**Data did not permit chi square analysis.

Critical Value of X^2 at $\alpha .05$, $df = 2$ is 5.99.

Hypothesis 12b: The educational expectations of Indian and white students are independent of mothers' occupation in the medium category.

When data for the educational expectations of Indian and white students were analyzed by medium category of mothers' occupation, no significant differences were found between the educational expectations of Indian and white students. The null hypothesis was retained as the computed chi square was 1.03. Frequency and percentage distributions and chi square analysis of the educational expectations of Indian and

white students by medium category of mothers' occupation are presented in Table 12a.

Hypothesis 12c: The educational expectations of Indian and white students are independent of mothers' occupation in the high category.

Data for the educational expectations of Indian and white students by high category of mothers' occupation did not permit chi square analysis. The frequency and percentage distributions for the educational expectations of Indian and white students by high category of mothers' occupation are presented in Table 12a.

Inasmuch as ethnicity was not found to be a significant variable in the educational expectations of Indian and white students as compared to category of mothers' occupation, ethnicity as a variable was removed to determine if a significant relationship existed between the educational expectations of all students and category of mothers' occupation. The hypothesis and analysis of data follow.

Hypothesis 12d: The educational expectations of all students are independent of mothers' occupation in all categories.

When data for the educational expectations of all students were analyzed by categories of mothers' occupation, significant differences at the .05 level of confidence were found among the educational expectations of students whose mothers worked in low, medium and high category occupations. The null hypothesis was rejected as the computed chi square was 40.47. The frequency and percentage distributions and

chi square analysis of the educational expectations of all students by category of mothers' occupation are presented in Table 12b.

Table 12b

Chi Square Analysis of Educational Expectations of All
Students by Categories of Mothers' Occupation

Educational Expectations	Category of Mothers' Occupation					
	Low		Medium		High	
	No.	Percent	No.	Percent	No.	Percent
Low	103	50	38	21	1	33
Medium	58	28	64	36	0	0
High	43	21	77	43	2	67
Total	204	99*	179	100	3	100

$$X^2 = 40.47**$$

$$df = 4$$

Critical Value of X^2 at $\alpha .05$, $df = 2$ is 9.49.

*Less than 100% due to rounding of decimals.

**Significant at the .05 level of confidence.

When data in Table 12b are viewed, the frequency and percentage distributions indicate that students whose mothers worked in higher category occupations expected to attain higher levels of education. Whereas 79 percent of the students whose mothers worked in a medium category occupation expected to attain a medium or high amount of education, 49 percent of the students whose mothers worked in a low category occupation expected to attain the same; 43 percent of the students whose mothers worked in a medium category occupation expected to attain

a high amount of education compared to 21 percent of the students whose mothers worked in a low category occupation. Due to the small number of mothers who worked in a high category occupation, explanation of data in this category has been omitted. Thus, category of mothers' occupation had a significant influence on the educational expectations of students when ethnicity was removed as a control variable.

Hypothesis 13: The educational expectations of Indian and white students are independent of family income. In order to facilitate analysis of data for the educational expectations of Indian and white students by family income, hypothesis 13 was divided into three sub-hypotheses according to low, medium and high family income.

Hypothesis 13a: The educational expectations of Indian and white students are independent of low family income.

When data for the educational expectations of Indian and white students were analyzed by low family income, no significant differences were found between the educational expectations of Indian and white students. The null hypothesis was retained as the computed chi square was 2.69. Frequency and percentage distributions and chi square analysis of the educational expectations of Indian and white students by low family income are presented in Table 13a.

Table 13a

Chi Square Analysis of Educational Expectations of
Indian and White Students by Family Income

Educational Expectations	Family Income											
	Low				Medium				High			
	Indian		White		Indian		White		Indian		White	
	No	%	No	%	No	%	No	%	No	%	No	%
Low	15	45	32	52	13	37	45	32	4	40	27	20
Medium	13	39	15	24	13	37	59	42	0	0	37	28
High	5	15	15	24	9	26	38	27	6	60	69	52
Total	33	99*	62	100	35	100	142	101*	10	100	133	100

$$\chi^2 = 2.69$$

$$df = 2$$

$$\chi^2 = .40$$

$$df = 2$$

$$\chi^2 = 4.48$$

$$df = 2$$

Critical Value of χ^2 at $\alpha .05$, $df = 2$ is 5.99.

*Less or greater than 100% due to rounding of decimals.

Hypothesis 13b: The educational expectations of Indian and white students are independent of medium family income.

When data for the educational expectations of Indian and white students were analyzed by medium family income, no significant differences were found between the educational expectations of Indian and white students. The null hypothesis was retained as the computed chi square was .40. Frequency and percentage distributions and chi square analysis of the educational expectations of Indian and white students by medium family income are presented in Table 13a.

Hypothesis 13c: The educational expectations of Indian and white students are independent of high family income.

When data for the educational expectations of Indian and white students were analyzed by high family income, no significant differences were found between the educational expectations of Indian and white students. The null hypothesis was retained as the computed chi square was 4.48. Frequency and percentage distributions and chi square analysis of the educational expectations of Indian and white students by high family income are presented in Table 13a.

Inasmuch as ethnicity was not found to be a significant variable in the educational expectations of Indian and white students as compared to level of family income, ethnicity as a variable was removed to determine if a significant relationship existed between the educational expectations of all students and level of family income. The hypothesis and analysis of data follow.

Hypothesis 13d: The educational expectations of all students are independent of level of family income.

When data for the educational expectations of all students were analyzed by level of family income, significant differences at the .05 level of confidence were found among the educational expectations of students who came from families with low, medium and high incomes. The null hypothesis was rejected as the computed chi square was 40.91. The frequency and percentage distributions and chi square analysis of the

educational expectations of all students by level of family income are presented in Table 13b.

Table 13b

Chi Square Analysis of Educational Expectations of
All Students by Level of Family Income

Educational Expectations	Family Income					
	Low		Medium		High	
	No.	Percent	No.	Percent	No.	Percent
Low	47	49	58	33	31	22
Medium	28	29	72	41	37	26
High	20	21	47	27	75	52
Total	95	99*	177	101*	143	100

$$\chi^2 = 40.91^{**}$$

$$df = 4$$

Critical Value of χ^2 at $\alpha .05$, $df = 4$ is 9.49.

*Less or greater than 100% due to rounding of decimals.

**Significant at the .05 level of confidence.

When data in Table 13b are viewed, the frequency and percentage distributions indicate that students from higher income families expected to attain higher levels of education. Whereas 78 percent of the students from high income families expected to attain medium and high levels of education, 68 percent and 58 percent of the students from medium and low income families, respectively, expected to attain the similar levels; 52 percent of the students from high income families expected to attain a high amount of education, compared to 27 percent

and 21 percent of the students from medium and low income families, respectively. In contrast, 49 percent of the students from low income families expected to attain a low amount of education, compared to 33 percent and 22 percent of the students from medium and high income families, respectively. Thus, level of family income had a significant influence on the educational expectations of students when ethnicity was removed as a control variable.

Occupation Expectations

Hypothesis 14: The occupational expectations of male students are independent of ethnicity.

When data for the occupational expectations of male students were analyzed for ethnicity, no significant differences were found between the occupational expectations of Indian males and white males. The null hypothesis was retained as the computed chi square was 3.18. The frequency and percentage distributions and chi square analysis for the occupational expectations of Indian and white males are presented in Table 14.

Hypothesis 15: The occupational expectations of female students are independent of ethnicity.

When data for the occupational expectations of female students were analyzed for ethnicity, no significant differences were found between the occupational expectations of Indian females and white

Table 14

Chi Square Analysis of Occupational Expectations
of Males by Ethnicity

Occupational Expectations	Males			
	Indian		White	
	No.	Percent	No.	Percent
Low	23	56	73	40
Medium	14	34	78	43
High	4	10	30	17
Total	41	100	181	100

$$X^2 = 3.18$$

$$df = 2$$

Critical Value of X^2 at $\alpha .05$, $df = 2$ is 5.99.

females. The null hypothesis was retained as the computed chi square was 1.18. The frequency and percentage distributions and chi square analysis of the occupational expectations of Indian and white females are presented in Table 15.

Hypothesis 16: The occupational expectations of Indian males are independent of grade level.

When data for the occupational expectations of Indian males were analyzed by grade level, no significant differences were found between the occupational expectations of Indian males in the sophomore and senior years of high school. The null hypothesis was retained as the computed chi square was 4.12. Frequency and percentage distributions

Table 15

Chi Square Analysis of the Occupational Expectations
of Females by Ethnicity

Occupational Expectations	Females			
	Indian		White	
	No.	Percent	No.	Percent
Low	9	23	37	22
Medium	24	62	113	68
High	6	15	16	10
Total	39	100	166	100

$$X^2 = 1.18$$

$$df = 2$$

Critical Value of X^2 at $\alpha .05$, $df = 2$ is 5.99.

and chi square analysis of the occupational expectations of male Indian sophomores and seniors are presented in Table 16.

Table 16

Chi Square Analysis of Occupational Expectations
of Indian Males by Grade Level

Occupational Expectations	Indian Males			
	Sophomore		Seniors	
	No.	Percent	No.	Percent
Low	16	70	7	39
Medium	5	22	9	50
High	2	9	2	11
Total	23	101*	18	100

$$X^2 = 4.12$$

$$df = 2$$

Critical Value of X^2 at $\alpha .05$, $df = 2$ is 5.99.

*Greater than 100% due to rounding of decimals.

Hypothesis 17: The occupational expectations of white males are independent of grade level.

When data for the occupational expectations of white males were analyzed by grade level, no significant differences were found between the occupational expectations of white males in the sophomore and senior years of high school. The null hypothesis was retained as the computed chi square was 5.92. Frequency and percentage distributions and chi square analysis of the occupational expectations of white male sophomores and seniors are presented in Table 17.

Table 17

Chi Square Analysis of Occupational Expectations
of White Males by Grade Level

Occupational Expectations	White Males			
	Sophomore		Senior	
	No.	Percent	No.	Percent
Low	46	48	27	31
Medium	37	39	41	48
High	12	13	18	21
Total	95	100	86	100

$$X^2 = 5.92$$

$$df = 2$$

Critical Value of X^2 at $\alpha .05$, $df = 2$ is 5.99.

Hypothesis 18: The occupational expectations of Indian females are independent of grade level.

When data for the occupational expectations of Indian females were analyzed by grade level, no significant differences were found between the occupational expectations of Indian females in the sophomore and senior years of high school. The null hypothesis was retained as the computed chi square was .66. Frequency and percentage distributions and chi square analysis for the occupational expectations of Indian females in the sophomore and senior years of high school are presented in Table 18.

Table 18

Chi Square Analysis of Occupational Expectations
of Indian Females by Grade Level

Occupational Expectations	Indian Females			
	Sophomore		Senior	
	No.	Percent	No.	Percent
Low	10	37	10	42
Medium	13	48	9	38
High	4	15	5	21
Total	27	100	24	101*

$$\chi^2 = .66$$

$$df = 2$$

Critical Value of χ^2 at $\alpha .05$, $df = 2$ is 5.99.

*Greater than 100% due to rounding of decimals.

Hypothesis 19: The occupational expectations of white females are independent of grade level.

When data for the occupational expectations of white females were analyzed by grade level, no significant differences were found between the occupational expectations of white females in the sophomore and senior years of high school. The null hypothesis was retained as the computed chi square was 1.90. Frequency and percentage distributions and chi square analysis of the occupational expectations of white females in the sophomore and senior years of high school are presented in Table 19.

Table 19

Chi Square Analysis of Occupational Expectations
of White Females by Grade Level

Occupational Expectations	White Females			
	Sophomore		Senior	
	No.	Percent	No.	Percent
Low	23	20	22	26
Medium	42	36	34	40
High	51	44	30	35
Total	116	100	86	101*

$$\chi^2 = 1.90$$

$$df = 2$$

Critical Value of χ^2 at $\alpha .05$, $df = 2$ is 5.99.

*Greater than 100% due to rounding of decimals.

Hypothesis 20: The occupational expectations of Indian students are independent of sex.

When data for the occupational expectations of Indian students were analyzed by sex, significant differences of the .05 level of confidence were found between the occupational expectations of Indian males and females. The null hypothesis was rejected as the computed chi square was 19.86. Frequency and percentage distributions and chi square analysis of the occupational expectations of Indian students by sex are presented in Table 20.

Table 20

Chi Square Analysis of Occupational Expectations
of Indian Students by Sex of Student

Occupational Expectations	Indian Students			
	Female		Male	
	No.	Percent	No.	Percent
Low	25	57	7	19
Medium	11	25	27	75
High	8	18	2	6
Total	44	100	36	100

$$X^2 = 19.86^*$$

$$df = 2$$

Critical Value of X^2 at $\alpha .05$, $df = 2$ is 5.99.

*Significant at the .05 level of confidence.

When data in Table 20 are viewed, the frequency and percentage distributions indicate that Indian males expected to enter higher categories of occupations than Indian females. Whereas 81 percent of the Indian males expected to enter medium and high categories of

occupations, 43 percent of the Indian females expected to enter similar categories. In contrast, 57 percent of the Indian females expected to enter low category occupations compared to 19 percent of the Indian males, or a ratio of three to one. While 75 percent of the Indian males expected to enter medium category occupations, 25 percent of the Indian females expected to enter the same, or a ratio of three to one. While Indian males expected to enter medium and high category occupations in greater percentages than Indian females, 18 percent of the Indian females expected to enter high category occupations compared to 6 percent of the Indian males, or a ratio of three to one.

Hypothesis 21: The occupational expectations of white students are independent of sex.

When data for the occupational expectations of white students were analyzed by sex, significant differences at the .05 level of confidence were found between the occupational expectations of white males and white females. The null hypothesis was rejected as the computed value of chi square was 21.85. The frequency and percentage distributions and chi square analysis of the occupational expectations of white students by sex are presented in Table 21.

When data in Table 21 are reviewed, the frequency and percentage distributions indicate that white females expected to enter higher category occupations than white males. Whereas 78 percent of the white females expected to enter medium and high category occupations, 60

percent of the white males expected to enter the same; 40 percent of the white males expected to enter low category occupations compared to 22 percent of the white females. While white females expected to enter higher categories of occupations in greater percentages than white males, 17 percent of the white males expected to enter high category occupations compared to 10 percent of the white females.

Table 21

Chi Square Analysis of Occupational Expectations
of White Students by Sex of Student

Occupational Expectations	White Students			
	Females		Males	
	No.	Percent	No.	Percent
Low	37	22	73	40
Medium	113	68	78	43
High	16	10	30	17
Total	166	100	181	100

$$X^2 = 21.85^*$$

$$df = 2$$

Critical Value of X^2 at $\alpha .05$, $df = 2$ is 5.99.

*Significant at the .05 level of confidence.

Hypothesis 22: The occupational expectations of Indian and white students are independent of amount of fathers' education. In order to facilitate analysis of data for the occupational expectations of Indian and white students by amount of fathers' education, hypothesis 22 was

divided into two sub-hypotheses according to low and high amounts of fathers' education.

Hypothesis 22a: The occupational expectations of Indian and white students are independent of low amount of fathers' education.

When data for the occupational expectations of Indian and white students were analyzed by low amount of fathers' education, no significant differences were found between the occupational expectations of Indian and white students. The null hypothesis was retained as the computed value of chi square was 1.69. The frequency and percentage distributions and chi square analysis of the occupational expectations of Indian and white students by low amount of fathers' education are presented in Table 22a.

Table 22a

Chi Square Analysis of Occupational Expectations of Indian and White Students by Amount of Fathers' Education

Occupational Expectations	Amount of Fathers' Education							
	Low				High			
	Indian		White		Indian		White	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Low	28	44	93	36	1	17	14	18
Medium	28	44	137	53	3	50	48	61
High	7	11	28	11	2	33	17	22
Total	63	99*	258	100	6	100	79	101*

$$\chi^2 = 1.69$$

$$df = 2$$

Critical Value of χ^2 at $\alpha .05$, $df = 2$ is 5.99.

*Less or greater than 100% due to rounding of decimals.

$$\chi^2 = .46$$

$$df = 2$$

Hypothesis 22b: The occupational expectations of Indian and white students are independent of high amount of fathers' education.

When data for the occupational expectations of Indian and white students were analyzed by high amount of fathers' education, no significant differences were found between the occupational expectations of Indian and white students. The null hypothesis was retained as the computed value of chi square was .46. Frequency and percentage distributions and chi square analysis of the occupational expectations of Indian and white students by high amount of fathers' education are presented in Table 22a.

Inasmuch as ethnicity was not found to be a significant variable in the occupational expectations of Indian and white students as compared to amount of fathers' education, ethnicity as a variable was removed to determine if a significant relationship existed between the occupational expectations of all students and amount of fathers' education. The hypothesis and analysis of data follow.

Hypothesis 22c: The occupational expectations of all students are independent of amount of fathers' education.

When data for the occupational expectations of all students were analyzed by amount of fathers' education, significant differences at the .05 level of confidence were found between the occupational expectations of students whose fathers attained low and high amounts of education. The null hypothesis was rejected as the computed chi square

was 15.62. The frequency and percentage distributions and chi square analysis of the occupational expectations of all students by amount of fathers' education are presented in Table 22b.

Table 22b

Chi Square Analysis of Occupational Expectations of All
Students by Amount of Fathers' Education

Occupational Expectations	Amount of Fathers' Education			
	Low		High	
	No.	Percent	No.	Percent
Low	121	38	15	18
Medium	165	51	51	60
High	35	11	19	22
Total	321	100	85	100

$$X^2 = 15.62^*$$

$$df = 2$$

Critical Value of X^2 at $\alpha .05$, $df = 2$ is 5.99.

*Significant at the .05 level of confidence.

When the data in Table 22b are viewed, the frequency and percentage distributions indicate that students whose fathers have attained a high amount of education expected to enter higher category occupations compared to students whose fathers have attained a low amount of education. Whereas 82 percent of the students whose fathers have attained a high amount of education expected to enter medium and high category occupations, 62 percent of the students whose fathers have attained a low amount of education expected to enter the same. Twenty-two percent

(22%) of the students whose fathers had a high amount of education expected to enter high category occupations compared to 11 percent of the students whose fathers had a low amount of education. Conversely, 38 percent of the students whose fathers had a low amount of education expected to enter low category occupations, compared to 18 percent of the students whose fathers had a high amount of education. Thus, amount of fathers' education had a significant influence on the occupational expectations of students when ethnicity was removed as a control variable.

Hypothesis 23: The occupational expectations of Indian and white students are independent of amount of mothers' education. In order to facilitate analysis of data for the occupational expectations of Indian and white students by amount of mothers' education, hypothesis 23 was divided into two sub-hypotheses according to low and high amounts of mothers' education.

Hypothesis 23a: The occupational expectations of Indian and white students are independent of low amount of mothers' education.

When data for the occupational expectations of Indian and white students were analyzed by low amount of mothers' education, no significant differences were found between the occupational expectations of Indian and white students. The null hypothesis was retained as the computed chi square was 1.78. Frequency and percentage distributions

for the occupational expectations of Indian and white students by low amount of mothers' education are presented in Table 23a.

Table 23a

Chi Square Analysis of Occupational Expectations of Indian and White Students by Amount of Mothers' Education

Occupational Expectations	Amount of Mothers' Education							
	Low				High			
	Indian		White		Indian		White	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Low	29	45	90	36	1	11	16	19
Medium	28	43	129	52	6	67	53	63
High	8	12	29	12	2	22	15	18
Total	65	100	248	100	9	100	84	100

$$X^2 = 1.78$$

$$df = 2$$

$$X^2 = .38$$

$$df = 2$$

Critical Value of X^2 at $\alpha .05$, $df = 2$ is 5.99.

Hypothesis 23b: The occupational expectations of Indian and white students are independent of high amount of mothers' education.

When data for the occupational expectations of Indian and white students were analyzed by high amount of mothers' education, no significant differences were found between the occupational expectations of Indian and white students. The null hypothesis was retained as the computed chi square was .38. Frequency and percentage distributions and chi square analysis of the occupational expectations of Indian and

white students by high amount of mothers' education are presented in Table 23a.

Inasmuch as ethnicity was not found to be a significant variable in the occupational expectations of Indian and white students as compared to amount of mothers' education, ethnicity as a variable was removed to determine if a significant relationship existed between the occupational expectations of all students and amount of mothers' education. The hypothesis and analysis of data follow.

Hypothesis 23c: The occupational expectations of all students are independent of amount of mothers' education.

When data for the occupational expectations of all students were analyzed by amount of mothers' education, significant differences at the .05 level of confidence were found between the occupational expectations of students whose mothers attained low and high amounts of education. The null hypothesis was rejected as the computed chi square was 12.97. The frequency and percentage distributions and chi square analysis for the occupational expectations of all students by amount of mothers' education are presented in Table 23b.

When data in Table 23b are viewed, the frequency and percentage distributions indicate that students whose mothers have attained a high amount of education expected to enter higher categories of occupations compared to students whose mothers have a low amount of education. Whereas 81 percent of the students whose mothers have attained a high

Table 23b

Chi Square Analysis of Occupational Expectations of All
Students by Amount of Mothers' Education

Occupational Expectations	Amount of Mothers' Education			
	Low		High	
	No.	Percent	No.	Percent
Low	119	38	17	18
Medium	157	50	59	63
High	37	12	17	18
Total	313	100	93	99*

$$X^2 = 12.97^{**}$$

$$df = 2$$

Critical Value of X^2 at $\alpha .05$, $df = 2$ is 5.99.

*Less than 100% due to rounding of decimals.

**Significant at the .05 level of confidence.

amount of education expected to enter medium and high category occupations, 62 percent of the students whose mothers have attained a low amount of education expected to enter the same categories. Thirty-eight percent (38%) of the students whose mothers have attained a low amount of education expected to enter low category occupations compared to 18 percent of the students whose mothers have attained a high amount of education. Thus, amount of mothers' education had a significant influence on the occupational expectations of students when ethnicity was removed as a control variable.

Hypothesis 24: The occupational expectations of Indian and white students are independent of category of fathers' occupation. In order

to facilitate the analysis of data for the occupational expectations of Indian and white students by category of fathers' occupation, hypothesis 24 was divided into three sub-hypotheses according to low, medium and high categories of fathers' occupation.

Hypothesis 24a: The occupational expectations of Indian and white students are independent of fathers' occupation in the low category.

When data for the occupational expectations of Indian and white students was analyzed by low category of fathers' occupation, no significant differences were found between the occupational expectations of Indian and white students. The null hypothesis was retained as the computed chi square was .22. Frequency and percentage distributions and chi square analysis of the occupational expectations of Indian and white students by low category of fathers' occupation are presented in Table 24.

Hypothesis 24b: The occupational expectations of Indian and white students are independent of fathers' occupation in the medium category.

When data for the occupational expectations of Indian and white students were analyzed by medium category of fathers' occupation, no significant differences were found between occupational expectations of Indian and white students. The null hypothesis was retained as the computed chi square was .34. Frequency and percentage distributions and chi square analysis of the occupational expectations of Indian and

Table 24a

Chi Square Analysis of Occupational Expectations of Indian and White Students by Category of Fathers' Education

Occupational Expectations	Category of Fathers' Occupation											
	Low				Medium				High			
	Indian		White		Indian		White		Indian		White	
	No	%	No	%	No	%	No	%	No	%	No	%
Low	20	48	50	47	5	23	53	27	0	0	1	6
Medium	18	43	49	46	13	59	117	59	1	50	9	50
High	4	10	8	7	4	18	28	14	1	50	8	44
Total	42	101*	107	100	22	100	198	100	2	100	18	100

$$X^2 = .22$$

$$df = 2$$

$$X^2 = .34$$

$$df = 2$$

$$X^2 = .12$$

$$df = 2$$

Critical Value of X^2 at $\alpha .05$, $df = 2$ is 5.99.

*Greater than 100% due to rounding of decimals.

white students by medium category of fathers' occupation are presented in Table 24a.

Hypothesis 24c: The occupational expectations of Indian and white students are independent of amount of fathers' occupation in the high category.

When data for the occupational expectations of Indian and white students were analyzed by high category of fathers' occupation, no significant differences were found between the occupational expectations of Indian and white students. The null hypothesis was retained as the computed chi square was .12. Frequency and percentage distributions and chi square analysis of the occupational expectations of

Indian and white students by high category of fathers' occupation are presented in Table 24a.

Inasmuch as ethnicity was not found to be a significant variable in the occupational expectations of Indian and white students as compared to category of fathers' occupation, ethnicity as a variable was removed to determine if a significant relationship existed between the occupational expectations of all students and categories of fathers' occupation. The hypothesis and analysis of data follow.

Hypothesis 24d: The occupational expectations of all students are independent of categories of fathers' occupation.

When data for the occupational expectations of all students were analyzed by categories of fathers' occupation, significant differences at the .05 level of confidence were found among the occupational expectations of students whose fathers worked in low, medium and high categories of occupations. The null hypothesis was rejected as the computed chi square was 37.78. The frequency and percentage distributions and chi square analysis of the occupational expectations of all students by category of fathers' occupation are presented in Table 24b.

When data in Table 24b are viewed, the frequency and percentage distributions indicate that students whose fathers worked in higher categories of occupations expected to enter higher categories of occupations. Whereas 95 percent of the students whose fathers worked in high category occupations expected to enter medium and high category

Table 24b

Chi Square Analysis of Occupational Expectations of All
Students by Categories of Fathers' Occupation

Occupational Expectations	Category of Fathers' Occupation					
	Low		Medium		High	
	No.	Percent	No.	Percent	No.	Percent
Low	70	47	58	26	1	5
Medium	67	45	130	59	10	50
High	12	8	32	15	9	45
Total	149	100	220	100	20	100

$$X^2 = 37.78^*$$

$$df = 4$$

Critical Value of X^2 at $\alpha .05$, $df = 4$ is 9.49.

*Significant at the .05 level of confidence.

occupations, 74percent and 53 percent of the students whose fathers worked in medium and low category occupations, respectively, expected to enter similar categories; 45 percent of the students whose fathers worked in a high category occupation expected to enter high category occupations; compared to 15 percent of the students whose fathers worked in a medium category occupation and 8 percent of the students whose fathers worked in a low category occupation. Conversely, 47 percent of the students whose fathers worked in a low category occupation expected to enter low category occupations, compared to 26 percent of the students whose fathers worked in a medium category occupation and 5 percent of the students whose fathers worked in a high category

occupation. Thus, category of fathers' occupation had a significant influence on the occupational expectations of students when ethnicity was removed as a control variable.

Hypothesis 25: The occupational expectations of Indian and white students are independent of category of mothers' occupation. In order to facilitate the analysis of data for the occupational expectations of Indian and white students by category of mothers' occupation, hypothesis 25 was divided into three sub-hypotheses according to low, medium and high category of mothers' occupation.

Hypothesis 25a: The occupational expectations of Indian and white students are independent of mothers' occupation in the low category.

When data for the occupational expectations of Indian and white students were analyzed by low category of mothers' occupation, no significant differences were found between the occupational expectations of Indian and white students. The null hypothesis was retained as the computed chi square was .83. Frequency and percentage distributions and chi square analysis of the occupational expectations of Indian and white students by low category of mothers' occupation are presented in Table 25a.

Hypothesis 25b: The occupational expectations of Indian and white students are independent of mothers' occupation in the medium category.

When data for the occupational expectations of Indian and white students were analyzed by medium category of mothers' occupation, no

Table 25a

Chi Square Analysis of Occupational Expectations of Indian and
White Students by Category of Mothers' Occupation

Occupational Expectations	Amount of Mothers' Occupation									
	Low				Medium				High*	
	Indian		White		Indian		White		Indian	White
	No	%	No	%	No	%	No	%	No	%
Low	19	42	65	35	5	28	36	27	0	0
Medium	21	47	98	53	9	50	75	56	0	0
High	5	11	23	12	4	22	22	17	0	0
Total	45	100	186	100	18	100	133	100	0	0
$\chi^2 = .83$ $df = 2$ Critical Value of χ^2 at $\alpha .05$, $df = 2$ is 5.99.										
$\chi^2 = .42$ $df = 2$ *Data did not permit chi square analysis.										

significant differences were found between the occupational expectations of Indian and white students. The null hypothesis was retained as the computed chi square was .42. Frequency and percentage distributions and chi square analysis of the occupational expectations of Indian and white students by medium category of mothers' occupation are presented in Table 25a.

Hypothesis 25c: The occupational expectations of Indian and white students are independent of mothers' occupation in the high category.

Data for the occupational expectations of Indian and white students by high category of mothers' occupation did not permit chi square analysis. Frequency and percentage distributions of the occupations

of Indian and white students by high category of mothers' occupation are presented in Table 25a.

Inasmuch as ethnicity was not found to be a significant variable in the occupational expectations of Indian and white students as compared to category of mothers' occupation, ethnicity as a variable was removed to determine if a significant relationship existed between occupational expectations of all students and categories of mothers' occupation. The hypothesis and analysis of data follow.

Hypothesis 25d: The occupational expectations of all students are independent of categories of mothers' occupation.

When data for the occupational expectations of all students were analyzed by categories of mothers' occupation, no significant differences were found among the occupational expectations of students whose mothers worked in low, medium and high category occupations. The null hypothesis was retained as the computed chi square was 6.11. Thus, categories of mothers' occupation did not have a significant influence on the occupational expectations of students when ethnicity was removed as a control variable. The frequency and percentage distributions and chi square analysis of the occupational expectations of all students by categories of mothers' occupation are presented in Table 25b.

Hypothesis 26: The occupational expectations of Indian and white students are independent of family income. In order to facilitate the analysis of data for the occupational expectations of Indian and white

Table 25b

Chi Square Analysis of Occupational Expectations of All
Students by Categories of Mothers' Occupation

Occupational Expectations	Category of Mothers' Occupation					
	Low		Medium		High	
	No.	Percent	No.	Percent	No.	Percent
Low	84	36	41	27	0	0
Medium	119	52	86	57	2	100
High	28	12	26	17	0	0
Total	231	100	151	101*	2	100

$$X^2 = 6.11$$

$$df = 4$$

Critical Value of X^2 at $\alpha .05$, $df = 4$ is 9.49.

*Greater than 100% due to rounding of decimals.

students by family income, hypothesis 26 was divided into three sub-hypotheses according to low, medium and high family income.

Hypothesis 26a: The occupational expectations of Indian and white students are independent of low family income.

When data for the occupational expectations of Indian and white students were analyzed by low family income, no significant differences were found between the occupational expectations of Indian and white students. The null hypothesis was retained as the computed chi square was .35. Frequency and percentage distributions and chi square analysis of the occupational expectations of Indian and white students by low family income are presented in Table 26a.

Hypothesis 26b: The occupational expectations of Indian and white students are independent of medium family income.

When data for the occupational expectations of Indian and white students were analyzed by medium family income, no significant differences were found between the occupational expectations of Indian and white students. The null hypothesis was retained as the computed chi square was .77. Frequency and percentage distributions and chi square analysis of the occupational expectations of Indian and white students by medium family income are presented in Table 26a.

Table 26a

Chi Square Analysis of Occupational Expectations of Indian
and White Students by Family Income

Occupational Expectations	Family Income											
	Low				Medium				High			
	Indian		White		Indian		White		Indian		White	
	No	%	No	%	No	%	No	%	No	%	No	%
Low	12	46	23	44	8	30	46	38	2	14	24	21
Medium	10	38	23	44	15	56	60	50	10	71	71	62
High	4	15	6	12	4	15	14	12	2	14	20	17
Total	26	99*	52	100	27	101*	120	100	14	99*	115	100

$$X^2 = .35$$

$$df = 2$$

$$X^2 = .77$$

$$df = 2$$

$$X^2 = .53$$

$$df = 2$$

Critical Value of X^2 at $\alpha .05$, $df = 2$ is 5.99.

*Less or greater than 100% due to rounding of decimals.

Hypothesis 26c: The occupational expectations of Indian and white students are independent of high family income.

When data for the occupational expectations of Indian and white students were analyzed by high family income, no significant differences were found between the occupational expectations of Indian and white students. The null hypothesis was retained as the computed chi square was .53. Frequency and percentage distributions and chi square analysis of the occupational expectations of Indian and white students by high family income are presented in Table 26a.

Inasmuch as ethnicity was not found to be a significant variable in the occupational expectations of Indian and white students as compared to level of family income, ethnicity as a variable was removed to determine if a significant relationship existed between the occupational expectations of all students and level of family income. The hypothesis and analysis of data follow.

Hypothesis 26d: The occupational expectations of all students are independent of family income.

When data for the occupational expectations of all students were analyzed by level of family income, significant differences at the .05 level of confidence were found among the occupational expectations of students who came from families with low, medium and high level income. The null hypothesis was rejected as the computed chi square was 17.95. The frequency and percentage distributions and chi square analysis of

the occupational expectations of all students by level of family income are presented in Table 26b.

Table 26b

Chi Square Analysis of Occupational Expectations of All
Students by Family Income

Occupational Expectations	Family Income					
	Low		Medium		High	
	No.	Percent	No.	Percent	No.	Percent
Low	56	44	54	37	26	20
Medium	54	43	75	51	81	63
High	16	13	18	12	22	17
Total	126	100	147	100	129	100

$$X^2 = 17.95^*$$

$$df = 4$$

Critical Value of X^2 at $\alpha .05$, $df = 4$ is 9.49.

*Significant at the .05 level of confidence.

When data in Table 26b are viewed, the frequency and percentage distributions indicate that students from higher income families expected to enter higher category occupations than students from lower income families. Whereas 80 percent of the students from high income families expected to enter medium and high category occupations, 63 percent and 56 percent of the students from medium and low income families, respectively, expected to enter the same. Conversely, 44 percent of the students from low income families expected to enter low category occupations, compared to 37 percent and 20 percent of the

students from medium and high income families, respectively. Thus, level of family income had a significant influence on the occupational expectations of students when ethnicity was removed as a control variable.

Summary

Significant relationships were found between the educational expectations of: (1) females with respect to ethnicity; (2) Indian males with respect to grade level; (3) Indian and white students with respect to high amount of fathers' education; and (4) Indian and white students with respect to low amount of mothers' education; (5) all students with respect to categories of mothers' occupation, categories of fathers' occupation and level of family income. Thus, the null hypotheses for these variables were rejected.

There were no significant relationships found between the educational expectations of: (1) males with respect to ethnicity; (2) white males with respect to grade level; (3) Indian females with respect to grade level; (4) white females with respect to grade level; (5) Indian students with respect to sex of student; (6) white students with respect to sex of student; (7) Indian and white students with respect to low amount of fathers' education; (8) Indian and white students with respect to high amount of mothers' education; (9) Indian and white students with respect to low, medium and high categories of fathers'

occupation; (10) Indian and white students with respect to low and medium categories of mothers' occupation (data for high category of mothers' occupation did not permit chi square analysis); and (11) Indian and white students with respect to low, medium and high family income. Thus, the null hypotheses for these variables were retained.

Significant relationships were found between the occupational expectations of: (1) Indian students with respect to sex of student; (2) white students with respect to sex of student; and (3) all students with respect to amount of fathers' education, amount of mothers' education, categories of fathers' occupation, and level of family income. Thus, the null hypotheses for these variables were rejected.

There were no significant relationships found between the occupational expectations of: (1) males with respect to ethnicity; (2) females with respect to ethnicity; (3) Indian males with respect to grade level; (4) white males with respect to grade level; (5) Indian females with respect to grade level; (6) white females with respect to grade level; (7) Indian and white students with respect to low and high amounts of fathers' education; (8) Indian and white students with respect to low and high amounts of mothers' education; (9) Indian and white students with respect to low, medium and high categories of fathers' occupation; (10) Indian and white students with respect to low and medium categories of mothers' occupation (data for high category of mothers' occupation did not permit chi square analysis); (11) Indian

and white students with respect to low, medium and high family income;
and (12) all students with respect to categories of mothers' occupation.
Thus, the null hypotheses for these variables were retained.

Chapter V

CONCLUSIONS, DISCUSSION, RECOMMENDATIONS AND SUMMARY

The purpose of this study has been to determine whether significant relationships existed between the educational and occupational expectations of American Indian and white students attending high schools on the Flathead Reservation with respect to the sex of the student, grade level, amount of parents' formal education, category of parents' occupation and level of family income. The conclusions, observations and recommendations presented in this chapter are based on the findings of this investigation and the experience of the researcher while serving as Director of the Center for Native American Studies at Montana State University from September 1974 to June 1979.

Educational Expectations

Ethnicity

Conclusions. Male Indian and male white students were found to expect to attain similar levels of education. Thus, ethnicity for male students was not found to be a significant variable. The data in Table 1 indicate that 63 percent of white males and 61 percent of Indian males expected to attain some type of postsecondary education. However, a greater percentage of white males expected to attain a high

level of education compared to Indian males. These findings are consistent with Moerk (1974:295) and others.

Female white students were found to expect to attain significantly higher levels of education than female Indian students. The data in Table 2 reveal that 61 percent of the Indian females and 77 percent of the white females expected to attain some type of postsecondary education. However, 40 percent of the white females expected to attain a high level of education compared to 18 percent of the Indian females, or a ratio greater than two to one. Thus, ethnicity was found to be a significant variable in the educational expectations of female students.

Discussion. It is the belief of this researcher that Indian females expected to attain lower educational levels than white females because the former tend to subscribe to the traditional cultural role of the Indian female as mother, homemaker and domestic mainstay. On the other hand, white females may subscribe less to the traditional role of the female and, therefore, expected to attain higher educational levels.

Grade Level in School

Conclusions. The students' grade level was found to be a significant variable in the educational expectations of Indian males. Seniors were found to expect to attain higher educational levels than sophomores. The data in Table 3 indicate that 33 percent of the senior

Indian males expected to attain a high level of education compared to 16 percent of the sophomore Indian males who expected to attain the same, or a ratio greater than two to one. Of the sophomores, 64 percent expected to attain some type of postsecondary education compared to 57 percent of the seniors. These findings are consistent with those of Edington (1975:36-37).

White male sophomores and seniors were found to expect to attain similar levels of education. Thus, grade level was not found to be a significant variable in the educational expectations of white males. Of the sophomores, 63 percent expected to attain some type of postsecondary education compared to 73 percent of the seniors. The data in Table 4 indicate that a greater percentage of seniors expected to attain a high level of education compared to sophomores. This pattern is similar to those found in the educational expectations of Indian males and females.

Indian female sophomores and seniors were found to expect to attain similar levels of education. Thus, grade level for Indian females was not found to be a significant variable. The data in Table 5 indicate that 63 percent of the sophomores and 59 percent of the seniors expected to attain some type of postsecondary education, yet a greater percentage of seniors expected to attain a high amount of education compared to sophomores. This pattern is similar to that found in the

educational expectations of both Indian and white males, findings consistent with those of Boyd (1970:4-5).

White female sophomores and seniors were found to expect to attain similar levels of education. Thus, grade level in school for white females was not found to be a significant variable. Eighty percent (80%) of the sophomores and 75 percent of the seniors expected to attain some type of postsecondary education. The data in Table 6 indicate a greater percentage of sophomores expected to attain a high level education compared to seniors. This pattern is the reverse exhibited by Indian and white males and Indian females.

Discussion. The investigator believes that one explanation for Indian males in their senior year to exhibit a greater tendency to expect to attain a high level of education compared to their sophomore counterparts is that the better and more affluent students tend to remain in school after the ninth and tenth grades where most dropouts tend to occur. This observation is consistent with those of Kelley and Wingrove (1975:45-55).

Sex of Respondents

Conclusions. Male and female Indian students were found to expect to attain similar levels of education. Thus, the sex of the student was not found to be a significant variable affecting the educational expectations of Indian students. These findings were

consistent with those of Bogle (1976:16) and contradictory to those of Edington (1975:36-37). The data in Table 7 indicate that 68 percent of the Indian females and 64 percent of the Indian males expected to attain some type of postsecondary education. However, 30 percent of the Indian females expected to attain a high level of education compared to 16 percent of the Indian males, or a ratio of nearly two to one.

Male and female white students were found to expect to attain similar levels of education. Thus, sex was not found to be a significant variable affecting the educational expectations of white students. These findings are consistent with those of Boyd (1970:4-5) and Bogle (1976:16). The data in Table 8 indicate that 72 percent of the white females and 68 percent of the white males expected to attain some type of postsecondary education.

Fathers' Education

Conclusions. Indian and white students whose fathers had a low amount of education expected to attain similar levels of education. Thus, low amounts of fathers' education was not found to be a significant variable. The data in Table 9 indicate that 65 percent of the Indian students and 66 percent of the white students whose fathers had a low amount of education expected to attain some type of postsecondary education. However, 30 percent of the white students

expected to attain a high level of education compared to 19 percent of the Indian students.

White students whose fathers had a high amount of education expected to attain significantly higher levels of education than Indian students whose fathers had a high amount of education. The data in Table 9 indicate that 86 percent of the white students expected to attain some type of postsecondary education compared to 33 percent of the Indian students. Fifty-seven percent (57%) of the white students whose fathers had a high amount of education expected to attain a high amount of education compared to 33 percent of the Indian students. Thus, high amount of fathers' education was found to be a significant variable in the educational expectations of Indian and white students.

Discussion. The data in Table 9 indicate that 90 percent of the Indian students' fathers had a low amount of education, compared to 77 percent of the white students' fathers; 10 percent of the Indian students' fathers had a high amount of education, compared to 23 percent of the white students' fathers. The data indicate that plans for increasing amounts of education are related to fathers' education. These findings are consistent with the findings of Lee, Ray, Vetter and others (1971:15), Mondart, Curtis and Dobbins (1970:114-115), and Sewell and Shah (1968:209).

Mothers' Education

Conclusions. White students whose mothers have a low amount of education expected to attain significantly higher levels of education than did Indian students whose mothers had a low amount of education. The data in Table 10 reveal that 64 percent of the white students whose mothers had a low amount of education expected to attain some type of postsecondary education compared to 47 percent of the Indian students whose mothers had a low amount of education. Conversely, 53 percent of the Indian students did not expect to attain any postsecondary education compared to 36 percent of the white students.

Indian and white students whose mothers had a high amount of education expected to attain similar levels of education. Thus, high amount of mothers' education was not found to be a significant variable.

Discussion. It is the belief of this researcher that Indian students whose mothers had a low amount of education may not receive as much encouragement to pursue postsecondary education as their white counterparts. This may be due to the fact that higher education, as a comparatively new phenomena among Indian people, has not been as readily incorporated into the value structures of the Indian respondents vis-a-vis the white respondents of this study.

Fathers' Occupation

Conclusions. Indian and white students whose fathers worked in a low category occupation expected to attain similar levels of education. Thus, low category of fathers' occupation was not found to be a significant variable. The data in Table 11a indicate that 59 percent of the Indian students and 60 percent of the white students whose fathers worked in a low category occupation expected to attain some type of postsecondary education. However, a greater percentage of Indian students expected to attain a low level of education while a greater percentage of white students expected to attain a high level of education.

Indian and white students whose fathers worked in a medium category occupation expected to attain similar levels of education. Thus, medium category of fathers' occupation was not found to be a significant variable. The data in Table 11a indicate that 73 percent of the Indian students and 74 percent of the white students whose fathers worked in a medium category occupation expected to attain some type of postsecondary education. However, 40 percent of the white students expected to attain a high level education compared to 19 percent of the Indian students, a ratio greater than two to one.

Indian and white students whose fathers worked in a high category occupation expected to attain similar levels of education. Thus, high category of fathers' occupation was not found to be a significant

variable. The data in Table 11a indicate that 100 percent of the Indian students and 100 percent of the white students whose fathers worked in a high category occupation expected to attain some type of postsecondary education. However, 73 percent of the white students expected to attain a high level education compared to 67 percent of the Indian students.

When ethnicity was removed as a control variable in the educational expectations of Indian and white students as compared to fathers' occupation, category of fathers' occupation was found to be a significant variable in the educational expectations of all students. Those students whose fathers worked in higher category occupations expected to attain higher amounts of education. Whereas 73 percent of the students whose fathers worked in high category occupations expected to attain a high level of education, 38 percent and 24 percent of the students whose fathers worked in medium and low category occupations, respectively, expected to attain a similar level of education.

Discussion. It is the belief of the investigator that fathers in higher category occupations generally transmit more positive attitudes and values towards educational attainment to their offspring. These findings and observations are consistent with those of Krause (1964:867), Rehberg and Westby (1967:362), Mondart, Curtis and Dobbins (1970:52-55), Seventy-Five Thousand Seniors, and Smith and Jilcoa (1975:15; 24).

It is important to note that 66 percent of the Indian students and 60 percent of the white students whose fathers worked in low category occupations expected to attain some type of postsecondary education. This may indicate that Indian and white students are breaking with traditional socialization patterns and are beginning to formulate postsecondary educational and occupational goals which exceed the attainment level of their fathers. It may also reflect the increased educational and occupational opportunities available to young people today.

Mothers' Category of Occupation

Conclusions. Indian and white students whose mothers worked in a low category occupation expected to attain similar levels of education. Thus, low category of mothers' occupation was not found to be a significant variable. The data in Table 12a reveal that 60 percent of the Indian students and 65 percent of the white students whose mothers worked in a low category occupation expected to attain some type of postsecondary education. However, 32 percent of the white students expected to attain a high level education compared to 18 percent of the Indian students.

Indian and white students whose mothers worked in a medium category occupation expected to attain similar levels of education. Thus, medium category of mothers' occupation was not found to be a significant

variable. The data in Table 12a indicate that 81 percent of the Indian students and 78 percent of the white students whose mothers worked in a medium category occupation expected to attain some type of postsecondary education. However, 44 percent of the white students expected to attain a high level education compared to 32 percent of the Indian students.

Data for the educational expectations of Indian and white students by high category of mothers' occupation did not permit chi square analysis. Thus, no conclusions were drawn.

When ethnicity was removed as a control variable in the educational expectations of Indian and white students as compared to mothers' occupation, category of mothers' occupation was found to be a significant variable in the educational expectations of all students. Those students whose mothers worked in higher category occupations expected to attain higher amounts of education. The data in Table 12b indicate that 43 percent of the students whose mothers worked in medium category occupations expected to attain a high level education compared to 21 percent of the students whose mothers worked in low category occupations.

Discussion. The findings indicate that mothers in high category occupations generally transmit more positive attitudes and values towards educational attainment to their children, regardless of the

ethnicity of the student. These findings are consistent with those of Rehberg and Westby (1967:362), Smith and Jilcoa (1971:15-24), Banduice (1967:263; 267), Mondart, Curtis and Dobbins (1970:52-55), and Seventy-Five Thousand Seniors (1970:38-39).

It is important to note that 71 percent of the mothers of Indian students worked in a low category occupation, yet 60 percent of the children of these mothers expected to attain some type of postsecondary education. Similarly, 59 percent of the mothers of white students worked in a low category occupation, yet 64 percent of the children of these mothers expected to attain some type of postsecondary education. This may indicate that these students are breaking with traditional socialization patterns and are beginning to formulate postsecondary educational goals which exceed attainment levels of their mothers. This may also be a reflection of increasing educational opportunities in American society.

Family Income

Conclusions. Indian and white students who came from families with a low annual income expected to attain similar levels of education. Thus, low family income was not found to be a significant variable. The data in Table 13a indicate that 54 percent of the Indian students and 48 percent of the white students who came from families with a low annual income expected to attain some type of postsecondary education.

However, 24 percent of the white students expected to attain a high level education compared to 15 percent of the Indian students.

Indian and white students who came from families with a medium annual income expected to attain similar levels of education. Thus, medium family income was not found to be a significant variable. The data in Table 13a indicate that 63 percent of the Indian students and 69 percent of the white students who came from medium income families expected to attain some type of postsecondary education.

Indian and white students who came from families with a high annual income expected to attain similar levels of education. Thus, high family income was not found to be a significant variable. The data in Table 13a indicate that 60 percent of the Indian students and 80 percent of the white students who came from high income families expected to attain a medium or high level of education.

When ethnicity was removed as a control variable in the educational expectations of Indian and white students as compared to family income, level of family income was found to be a significant variable in the educational expectations of all students. Those students who came from higher income families expected to attain higher amounts of education. The data in Table 13b indicate that 52 percent of the students from high income families expected to attain a high level education compared to 27 percent and 21 percent of students from medium and low income families, respectively.

Discussion. The findings indicate that students from higher income families are more likely to expect to attain high educational goals than are students from lower income families. Thus, socioeconomic status is a strong predictor of the educational expectations of youth. These findings are consistent with those of Coster (1959:62), Keller and Zavelloni (1964:60; 69-70), Gribbons and Lohnes (1966:66-70) and Larson (1971:5).

It is important to note that 54 percent of the Indian students and 48 percent of the white students from low income families expected to attain some type of postsecondary education. This may indicate that these students are transcending traditional patterns of socialization and are expecting to take advantage of increased postsecondary educational opportunities.

Occupational Expectations

Ethnicity

Conclusions. Male Indian and male white students were found to expect to enter similar categories of occupations. Thus, ethnicity was not found to be a significant variable in the occupational expectations of males. White males expected to enter higher category occupations in greater percentages than Indian males. Whereas 44 percent of the Indian males expected to enter medium and high category occupations, 60 percent of the white males expected to enter the same. A

higher percentage of Indian males (56 percent) expected to enter low category occupations compared to white males (40 percent).

Female Indian and female white students expected to enter similar category occupations. Thus, ethnicity was not found to be a significant variable in the occupational expectations of females. These findings are consistent with those of Thomas (1976:49), Venegas (1973:91), and Cosby (1976:16-17).

Grade Level in School

Conclusions. Indian males in the sophomore and senior years of high school expected to enter similar categories of occupations. Thus, grade level in school was not found to be a significant variable in the occupational expectations of Indian males. Seniors expected to enter higher categories of occupations than sophomores. Of the seniors, 61 percent expected to enter medium and high category occupations compared to 31 percent of the sophomores; 70 percent of the sophomores expected to enter low category occupations compared to 39 percent of the seniors.

White males in their sophomore and senior years of high school expected to enter similar categories of occupations. Thus, grade level was not found to be a significant variable in the occupational expectations of white males. Seniors expected to enter higher categories of occupations in comparison to sophomores. Of the seniors, 69 percent

expected to enter medium or high type occupations compared to 52 percent of the sophomores; 48 percent of the sophomores expected to enter low type occupations compared to 31 percent of the seniors.

Indian females in their sophomore and senior years of high school, expected to enter similar categories of occupations. Thus, grade level of the student was not found to be a significant variable in the occupational expectations of Indian females. However, seniors expected to enter high occupation category in greater percentages than sophomores.

White females in their sophomore and senior years of high school expected to enter similar categories of occupations. Thus, grade level of the student was not found to be a significant variable in the occupational expectations of white females.

Sex of Respondent

Conclusions. Significant differences were found between the occupational expectations of Indian males and females. Of the Indian females, 57 percent, 25 percent and 18 percent expected to enter low, medium and high category occupations, respectively. Of the males, 19 percent, 75 percent and 6 percent expect to enter low, medium and high category occupations, respectively. Thus, sex was found to be a significant variable in the occupational expectations of Indian students. These findings are consistent with those of Edington (1975:35).

Significant differences were found between the occupational expectations of white males and females. Of the females, 22 percent, 68 percent and 10 percent expected to enter low, medium and high categories of occupations, respectively. Of the males, 40 percent, 43 percent and 17 percent expected to enter low, medium and high categories of occupations, respectively. Thus, sex was found to be a significant variable in the occupational expectations of white students. These findings are consistent with those of Edington (1975:35) and Aldag (1975:312-314).

Discussion. It is the belief of this investigator that male and female Indians differ in their occupational expectations for inter-related reasons. First, females traditionally have been the domestic mainstay in Flathead, Salish and Kootenai families and have been expected to provide a base of security in the home. The low category of occupations which Indian females expect to enter are homemaker, teachers' aides, cooks, community health representatives, and other similar occupations. The high category occupations the Indian females expected to enter are the professional, managerial and technical occupations. These occupations tend to represent secure, year-round employment where one works consistent hours and can be in the home on a regular basis. Indian males, on the other hand, expected to enter medium category occupations which include outdoor work such as farming,

ranching, construction, forestry and similar occupations. These occupations are seasonal and contingent upon climatic conditions, although they do not provide the potential for comparatively larger economic rewards over a shorter period of time. Thus, it appears that Indian males and females tend to select occupations based on traditional values and role expectations of the male and female.

It is the belief of this investigator that white females expected to enter medium and high category occupations in greater percentages than white males because they tended not to subscribe to the traditional role of the female in American society. This tendency may also be a reflection of greater opportunities for women in professional, managerial and technical professions.

Fathers' Education

Conclusions. Indian and white students whose fathers had a low amount of education expected to enter similar occupation categories. Thus, low amount of fathers' education was not found to be a significant variable. However, white students expected to enter higher occupation categories in greater percentages than Indian students.

Indian and white students whose fathers had a high amount of education expected to enter similar occupation categories. Thus, high amount of fathers' education was not found to be a significant variable.

When ethnicity was removed as a control variable in the occupational expectations of Indian and white students as compared to fathers' education, amount of fathers' education was found to be a significant variable in the occupational expectations of all students. Those students whose fathers had a higher amount of education expected to enter higher categories of occupations. The data in Table 22b indicate that 82 percent of the students whose fathers attained high amounts of education expected to enter medium and high category occupations compared to 62 percent of the students whose fathers attained a low amount of education. Conversely, 38 percent of the students whose fathers attained a low amount of education expected to enter low category occupations compared to 18 percent of the students whose fathers attained a higher amount of education.

Discussion. The findings indicate that fathers with higher educational levels generally transmit more positive attitudes and values towards higher occupational attainment. Thus, it appears that students whose fathers are more educated tend to receive more encouragement to enter higher occupation categories. These findings coincide with those of Cosby (1969:16-17), Mondart, Curtis and Dobbins (1970: 114-115) and others.

It is important to note that 56 percent of the Indian students and 64 percent of the white students whose fathers had a low amount of

education expected to enter medium and high occupation categories. This may indicate that Indian and white students are breaking with traditional socialization patterns and are beginning to formulate post-secondary occupational goals which exceed the attainment level of their fathers.

Mothers' Education

Conclusions. Indian and white students whose mothers had a low amount of education expected to enter similar occupation categories. Thus, low amount of mothers' education was not found to be a significant variable.

Indian and white students whose mothers had a high amount of education expected to enter similar occupation categories. Thus, low amount of mothers' education was not found to be a significant variable.

When ethnicity was removed as a control variable in the occupational expectations of Indian and white students as compared to mothers' education, amount of mothers' education was found to be a significant variable factor in the occupational expectations of all students. Those students whose mothers had a higher amount of education expected to enter higher categories of occupations.

Discussion. The findings indicate that mothers with higher educational levels generally transmit more positive attitudes and values towards higher occupational attainment. Thus, it appears that

students whose mothers have more formal education tend to receive more encouragement to enter higher occupation categories. These findings are consistent with those of Hatfield (1976:113-116), Salter and Falk (1978:29-31) and Mondart, Curtis and Dobbins (1970:114-115).

It is important to note that 55 percent of the Indian students and 69 percent of the white students whose mothers have a low amount of education expected to enter medium or high categories of occupations. This may indicate that Indian and white students have transcended traditional socialization patterns and have formulated occupational goals exceeding the attainment levels of their mothers. It may also be indicative of increased educational and subsequently, employment opportunities.

Fathers' Occupation

Conclusions. Indian and white students whose fathers worked in a low category occupation expected to enter similar occupation categories. Thus, low category of fathers' occupation was not found to be a significant variable.

Indian and white students whose fathers worked in medium category occupations expected to enter similar occupation categories. Thus, medium category of fathers' occupation was not found to be a significant variable.

Indian and white students whose fathers worked in high category occupations expected to enter similar occupation categories. Thus, high category of fathers' occupation was not found to be a significant variable.

When ethnicity was removed as a control variable in the occupational expectations of Indian and white students as compared to fathers' occupation, category of fathers' occupation was found to be a significant variable in the occupational expectations of all students. Those students whose fathers worked in higher categories of occupations expected to enter higher categories of occupations. The data in Table 24b indicate that 95 percent of the students whose fathers worked in high category occupations expected medium and high type occupations compared to 74 percent and 53 percent of the students whose fathers worked in medium and low category occupations, respectively.

Discussion. The findings indicate that fathers in higher occupational categories generally transmit more positive attitudes and values towards higher occupational attainment than fathers in lower occupational categories. Thus, it appears that students whose fathers worked in higher categories of occupations tended to receive more encouragement to enter higher categories of occupations. These findings parallel those of Keller and Zavalloni (1964:64-70), Smith and Jilcoa (1971:15-24) and Cosby (1969:16-17) and others.

It is important to note that 53 percent of both Indian and white students whose fathers worked in a low category occupation expected to enter medium and high category occupations, while 77 percent of the Indian students and 73 percent of the white students whose fathers worked in a medium category occupation expected to enter medium and high category occupations. This may indicate that both Indian and white students are breaking with traditional socialization patterns and are beginning to formulate occupational goals which exceed those of their fathers.

Mothers' Occupation

Conclusions. Indian and white students whose mothers worked in low category occupations expected to enter similar occupation categories. Thus, low category of mothers' occupation was not found to be a significant variable.

Indian and white students whose mothers worked in medium category occupations expected to enter similar occupation categories. Thus, medium category of mothers' occupation was not found to be a significant variable.

Data for high category of mothers' occupation did not permit chi square analysis. Thus, no conclusions were drawn.

When ethnicity was removed as a control variable in the occupational expectations of Indian and white students as compared to

mothers' occupation, category of mothers' occupation was not found to be a significant variable in the occupational expectations of all students. Thus, category of mothers' occupation did not appear to affect the occupational expectations of students.

Discussion. From these findings it appears that fathers' occupations had more influence than mothers' occupations on the occupational expectations of students in the study. These findings are consistent with those of Smith and Jilcoa (1971:15; 24) and Cosby (1969:16-17).

It is important to note that 58 percent of the Indian students and 65 percent of the white students whose mothers worked in a low category occupation expected to enter medium and high category occupations, whereas 72 percent of the Indian students and 73 percent of the white students whose mothers worked in medium category occupations expected to enter medium and high category occupations. These trends may indicate that students are breaking with traditional patterns of socialization and view higher type occupation categories as a vehicle of social mobility.

Family Income

Conclusions. Indian and white students who came from low income families expected to enter similar occupation categories. Thus, low family income was not found to be a significant variable.

Indian and white students who came from medium income families expected to enter similar occupation categories. Thus, medium family income was not found to be a significant variable.

Indian and white students who came from high income families expected to enter similar occupational categories. Thus, high family income was not found to be a significant variable.

When ethnicity was removed as a control variable in the occupational expectations of Indian and white students as compared to family income, level of family income was found to be a significant variable in the occupational expectations of all students. Those students who came from higher income families expected to enter higher occupation categories. The data in Table 26b indicate that 80 percent of the students who came from high income families expected to enter medium and high category occupations compared to 63 percent and 56 percent of the students who came from medium and low income families, respectively.

Discussion. Those students who came from high income homes received more encouragement to enter higher occupation categories. Thus, socioeconomic status has a positive effect on occupational expectations. These observations and findings are consistent with those of Sewell, Haller and Strauss (1957:69), Caro and Philbrand (1965:468), Oberle, Stowers and Darby (1974:101), Cosby and Picou (1975:17-20), Bogie (1976:253-254), McLaughlin, Hunt and Montgomery (1976:161-162) and Harvey and Kerin (1978:265-266).

It is important to note that 53 percent of the Indian students and 56 percent of the white students who came from low income families expected to enter medium or high occupation categories; 71 percent of the Indian students and 62 percent of the white students from medium income families expected to enter medium or high occupation categories. These trends may indicate that both Indian and white students are breaking with traditional socialization patterns and plan to take advantage of educational and subsequent occupational opportunities available to them.

Recommendations

In recognition of the findings of this study, it is recommended that tribal educators and public school officials undertake cooperative, collaborative efforts to establish and maintain postsecondary educational information and orientation programs and career education programs to meet the needs of the students of this study. This cooperative effort could enable students to become more aware of postsecondary educational and career opportunities available to them, as well as provide them with necessary information on which to base postsecondary educational and career choices commensurate with individual needs and aspirations. The following are specific recommendations to be included in the recommended postsecondary educational and career opportunities program.

1. It is recommended that the talents of Indian and non-Indian role models, male and female, who have completed two or four year college programs and graduate and professional programs, be utilized as motivating elements to encourage students to strive to realize their potential in life. It is further recommended that Indian and non-Indian role models representing various professions and careers be used as guest lecturers in the programs for similar reasons. This, as well as appropriate guidance and counseling services, could serve to alleviate sex-role and ethnic stereotyping regarding the pursuit of educational and occupational opportunities, while providing for increased freedom of individual choice, potential, and self-determination.
2. It is recommended that postsecondary educational and career education programs be coordinated with activities in the elementary, middle and high schools on the Flathead Reservation. This comprehensive approach should be designed to identify the potential dropout or pushout in an effort to provide services that would encourage those so identified to remain in school. It is further recommended that such a comprehensive program address the differences in educational and occupational expectations between sophomores and seniors and deal

with them in a manner harmonious and consistent with the needs and goals of the individual.

3. It is recommended that these programs maintain comprehensive records of the clients, including personal background information, academic information and career interest inventories. Such a system would provide the opportunities for counselors to be more responsive to the needs of students from lower socioeconomic backgrounds, thereby affording the individual clients the greatest opportunity of choice and ability to become more fully functioning individuals in this multi-dimensional, multicultural society.
4. Finally, it is recommended that the educational and career opportunities programs include activities that will provide for the participation of parents and significant others of the students in this study. In this manner these persons will be able to more fully understand and appreciate the educational and career opportunities, and subsequent benefits, available to students today. This increased appreciation will enable parents and significant others to transmit increased positive attitudes regarding the value of post-secondary education and career opportunity.

Summary and Implications for Further Research

It is encouraging to note that over 50 percent of the students in this study expected to attain some type of postsecondary education and enter medium and high occupation categories. In order to facilitate the realization of these expectations, attention to the recommendations set forth herein will require careful planning, cooperation and coordination among tribal educators and public school officials. A comprehensive career education program could provide students with the opportunity to examine postsecondary educational and career options available, thereby affording each the opportunity to make respective choices and decisions designed to meet individual needs and goals.

The researcher suggests that one of the contributions of this investigation is its applicability to the study of the process of educational and occupational choice and career development. In addition, the investigator believes that this study has made a contribution to the accumulation of resource data for utilization by tribal educators, public educators, counselors, program coordinators and supervisors.

With regard to future research, assessment of the effect of significant other factors on the educational and occupational expectations of high school students on the Flathead Reservation should be undertaken. Also, future research should address the educational and occupational aspirations and expectations of students with emphasis on goal deflection between aspirations and expectations.

LITERATURE CITED

LITERATURE CITED

- Aldag, Ramon. "Male-Female Differences in Occupational Attitudes within Minority Groves." Journal of Vocational Behavior, 6 (1975), 305-14.
- Banduice, Raymond. "The Effects of Mothers' Employment on Achievement, Aspirations and Expectations of the Child." Personnel and Guidance Journal, 46 (1967), 263-67.
- Bass, Willard. The American Indian High School Graduate in the Southwest. Albuquerque: Southwestern Cooperative Educational Laboratory, 1969.
- Berman, Gerald, and Marie Haug. "Occupational and Educational Goals and Expectations: The Effects of Race and Sex." Social Problems, 23 (1975), 166-81.
- Berry, Brewton. The Education of the American Indian: A Survey of the Literature, U.S., Educational Resources Information Center, ERIC Document ED 026 545, 1968.
- Bervon, Irene. "History of Indian Education on the Flathead Reservation." Master's thesis, University of Montana, 1959.
- Bogie, Donald. "Occupational Aspiration - Expectation Discrepancies Among High School Seniors." Vocational Guidance Quarterly, 24 (1976), 250-55.
- Bogie, Donald. The Occupational and Educational Aspirations and Plans of Rural Kentucky High School Seniors, U.S., Educational Resources Information Center, ERIC Document ED 136 999, 1976.
- Boyd, Viralyn. Aspirations, Expectations and Attitudes of South Carolina High School Students, U.S., Educational Resources Information Center, ERIC Document ED 107 406, 1970.
- Boyd, Viralyn. Changes in Educational Aspirations from Sophomore to Senior Year of a State-Wide Sample of South Carolina High School Students, U.S., Educational Resources Information Center, ERIC Document ED 107 405, 1970.
- Boyd, Viralyn. Changes in Occupational Aspirations of South Carolina High School Students, U.S., Educational Resources Information Center, ERIC Document ED 093 555, 1974.

- Brockman, Thomas. "Social Class and Educational Level on the Flathead Reservation." Journal of American Indian Education, 10, No. 1 (1970), 23-31.
- Burlin, Frances-Dee. "Sex-Role Stereotyping - Occupational Aspirations of Female High School Students." The School Counselor, 24 (1976), 102-08.
- Campbell, Robert, and Jean Parsons. "Readiness for Vocational Planning in Junior High School." Journal of Vocational Education, 12, 401-17.
- Canan, James. Higher Education Grants Annual Report, 1973, U.S., Bureau of Indian Affairs Report. Billings, MT: Department of Interior, 1974.
- Canan, James. Higher Education Grants Annual Report, 1974, U.S., Bureau of Indian Affairs Report. Billings, MT: Department of Interior, 1974.
- Canan, James. Higher Education Grants Annual Report, 1975, U.S., Bureau of Indian Affairs Report. Billings, MT: Department of Interior, 1975.
- Canan, James. Higher Education Grants Annual Report, 1976, U.S., Bureau of Indian Affairs Report. Billings, MT: Department of Interior, 1976.
- Caplow, Theodore. The Sociology of Work. Minneapolis: University of Minnesota Press, 1954.
- Caro, F.G., and C.T. Philbrand. "Aspirations and Expectations: A Re-examination of the Bases of Social Class Differences in the Occupational Orientations of Male High School Seniors." Sociology and Social Research, 49 (1965), 465-75.
- Cohen, Elizabeth. "Parental Factors in Educational Mobility." Sociology of Education, 38 (1965), 404-25.
- Coombs, Madison. The Educational Disadvantage of the American Indian Student. Las Cruces, NM: New Mexico State University Press, 1970.

- Cosby, Arthur. The Disadvantaged Student, Goal Blockage and the Occupational Aspirations of Southern Youth, U.S., Educational Resources Information Center, ERIC Document ED 089 926, 1969.
- Cosby, Arthur, and Steven Picou. Structural Models and Occupational Mobility Patterns: Racial Variations in the Deep South, U.S., Educational Resources Information Center, ERIC Document ED 121 521, 1975.
- Coster, John. "Some Characteristics of High School Pupils from Three Income Groups." Journal of Educational Psychology, 50 (1959), 55-62.
- Debord, Larry, Larry Griffan, and Melissa Clark. "Race and Sex Influences in the Schooling Process of Rural and Small Town Youth." Sociology of Education, 50 (1977), 85-102.
- De Hoyos, Genevieve. Mobility Orientation and Mobility Skills of Youth in and Institutionally Dislocated Group: The Pima Indians, U.S., Educational Resources Information Center, ERIC Document ED 056 812, 1971.
- Doohan, Robert. "The Attitudes and Opinions of Parents, Pupils and Teachers Concerning Their High School at St. Ignatius, Montana." Master's thesis, University of Montana, 1957.
- Drabick, Lawrence. Factors Associated with Expectations: North Dakota High School Seniors, U.S., Educational Resources Information Center, ERIC Document ED 097 165, 1974.
- Edgington, Everett. Academic Achievement of American Indian Students: Review of Recent Literature, U.S., Educational Resources Information Center, ERIC Document ED 032 168, 1969.
- Edgington, Everett. Educational, Occupational and Residence Aspirations and Expectations of Rural and Minority Youth in New Mexico, U.S., Educational Resources Information Center, ERIC Document ED 116 845, 1975.
- Empey, Lamar. "Social Class and Occupational Aspiration: A Comparison of Absolute and Relative Measurement." American Sociological Review, 21 (1956), 703-09.

- Fenton, Karen. Higher Education Grants Annual Report, 1973, U.S., Bureau of Indian Affairs Report. Dixon, MT: Department of Interior, 1973.
- Fenton, Karen. Higher Education Grants Annual Report, 1974, U.S., Bureau of Indian Affairs Report. Dixon, MT: Department of Interior, 1974.
- Fenton, Karen. Higher Education Grants Annual Report, 1975, U.S., Bureau of Indian Affairs Report. Dixon, MT: Department of Interior, 1975.
- Fenton, Karen. Higher Education Grants Annual Report, 1976, U.S., Bureau of Indian Affairs Report. Dixon, MT: Department of Interior, 1976.
- Fenton, Karen. Higher Education Grants Annual Report, 1977, U.S., Bureau of Indian Affairs Report. Pablo, MT: Department of Interior, 1977.
- Ferguson, George. Statistical Analysis in Psychology and Education. New York: McGraw Hill, 1971.
- Ginzberg, Eli, and others. Occupational Choice: An Approach to a General Theory. New York: Columbia University Press, 1951.
- Gribbons, Warren, and Paul Lohnes. "A Five Year Study of Students' Educational Aspirations." Vocational Guidance Quarterly, 15 (1966), 66-70.
- Harvey, Michael, and Roger Kerin. "The Influence of Social Stratification and Age on Occupational Aspirations of Adolescents." Journal of Educational Research, 71 (1978), 262-66.
- Hatfield, Nancy. The Stability of Status Projections Among Young Women in the South, U.S., Educational Resources Information Center, ERIC Document ED 131 991, 1976.
- Havighurst, Robert. The Education of Indian Children and Youth: Summary Report and Recommendations. Chicago: University of Chicago Press, 1970.
- Havighurst, Robert, and others. Growing Up in River City. New York: John Wiley and Sons, 1962.

- Havighurst, Robert. Mental Development and School Achievement of American Indian Children and Youth. National Study of American Indian Education: Research Reports, Vol. 3, No. 1. Chicago: University of Chicago Press, 1970.
- Heinsohn, Anne. "Vocational Aspirations of American Youth." American Vocational Journal, 49 (1974), 36-38.
- High School Student Survey, U.S., Educational Resources Information Center, ERIC Document ED 136 876, 1977.
- Hildebrand, Alice. Fiscal Year 1973 Statistics Concerning Indian Education, U.S., Bureau of Indian Affairs Report. Lawrence, KS: Haskell Indian Junior College Publications Service, 1973.
- Hildebrand, Alice. Fiscal Year 1974 Statistics Concerning Indian Education, U.S., Bureau of Indian Affairs Report. Lawrence, KS: Haskell Indian Junior College Publications Service, 1974.
- Holland, John. "A Theory of Vocational Choice." Journal of Counseling Psychology, 6 (1959), 34-45.
- Hollingshead, August. Elmtown's Youth. New York: John Wiley and Sons, 1949.
- Hollingshead, August. Two Factor Index of Social Position. New Haven, CT: Yale University Press, 1957.
- Hoppock, Robert. Occupational Information. New York: McGraw Hill, 1967.
- Horner, James, James Baterbaugh, and Judith Carefoot. Factors Relating to Occupational and Educational Decision-Making of Rural Youth. Lincoln, NE: University of Nebraska Press, 1967.
- Kayser, Joyce. "Scholastic Performance and Ethnicity: A Preliminary Report of Seven School Classes." Journal of American Indian Education, 3, No. 1 (1963), 27-30.
- Keller, Suzanne, and Marisa Zavalloni. "Ambition and Social Class: A Respecification." Social Forces, 43 (1964), 58-70.
- Kelley, Paul, and Ray Wingrove. "Educational and Occupational Choices of Black and White Male and Female Students in a Rural Georgia Community." Journal of Research and Development in Education, 9, No. 1 (1975), 45-55.

Kerchhoff, Alan, and Richard Campbell. "Black-White Differences in the Educational Attainment Process." Sociology of Education, 50 (1977), 15-28.

Kersey, H.A., and H.R. Greene. "Educational Achievement Among Three Florida Seminole Reservations." School and Society, 100 (1972), 25-28.

Kleinfeld, Elizabeth, and K.L. Kohout. "Increasing the College Success of Alaska Natives." Journal of American Indian Education, 13, No. 1 (1974), 27-21.

Kohn, Melvin. "Social Class and Parental Values." American Journal of Sociology, 64 (1959), 337-51.

Krauss, Irving. "Sources of Educational Aspiration Among Working Class Youth." American Sociological Review, 29 (1964), 867-79.

Kuvelsky, William, and Robert Bealer. "A Classification of the Concept: Occupational Choice." Rural Sociology, 31 (1966), 265-76.

Kuvelsky, William, and Phillip Monk. Historical Change in Status Aspirations and Expectations of Mexican American Youth from the Border Area of Texas: 1967-73, U.S., Educational Resources Information Center, ERIC Document ED 104 591, 1975.

Kuvelsky, William, and George Ohlendorf. Occupational Aspirations and Expectations: A Bibliography of Research Literature. College Station, TX: Texas A&M University, 1966.

Kuvelsky, William, and David Reynolds. Educational Aspirations and Expectations: A Bibliography of the Literature. College Station, TX: Texas A&M University, 1970.

Kuvelsky, William, and David Reynolds. Occupational Aspirations and Expectations: A Bibliography of Research Literature. College Station, TX: Texas A&M University, 1970.

Kuvelsky, William, and David Reynolds. Youth's Projections for Residence, Income and Family Status: A Bibliography of the Literature. College Station, TX: Texas A&M University, 1970.

- Kuvelsky, William, and Kennedy Upham. Social Ambitions of Teen-Age Boys Living in an Economically Depressed Area of the South: A Racial Comparison, U.S., Educational Resources Information Center, ERIC Document ED 014 339, 1967.
- Kuvelsky, William and others. Ethnic Group Identity and Occupational Status Projections of Teenage Boys and Girls: Mexican-American, Black, Native American and Anglo Youth, U.S., Educational Resources Information Center, ERIC Document ED 121 499, 1976.
- Lang, Samuel. Children of the Flathead: "A Study of Culture in a Changing Society." Master's thesis, University of Montana, 1965.
- Larson, Wayne. A Comparative Analysis of Indian and Non-Indian Parents' Influence on Educational Aspirations, Expectations, Preference and Behavior of Indian and Non-Indian High School Students in Four High Schools, U.S., Educational Resources Information Center, ERIC Document ED 056 788, 1971.
- Larson, Wayne. A Comparison of the Differential Effect of Ethnicity and Perception of Family Income on Educational Aspirations, Preparation and Parental Influence of Indian and Non-Indian Students in Four Rural High Schools in Montana, U.S., Educational Resources Information Center, ERIC Document ED 056 789, 1971.
- Lee, Sylvia, and others. High School Senior Girls and the World of Work: Occupational Knowledge, Attitudes and Plans, U.S., Educational Resources Information Center, ERIC Document ED 047 155, 1972.
- Lorenz, Gerda. "Aspirations of Low-Income Blacks and Whites: A Case of Reference Group Processes." American Journal of Sociology, 78 (1972), 371-98.
- Lozar, Steve. "Employment Survey Final Report." Dixon, MT: Human Resources Development Office, Confederated Salish and Kootenai Tribes, 1976.
- Lucas, Merle, and others. Profile of the Montana Native American. Helena, MT: Department of Community Affairs, Office of the Governor, 1974.
- Marble, Bessie Young. "The Intelligence and Achievement of White and Salish Children." Master's thesis, University of Montana, 1937.

- McDonald, Joseph, and Lyle Berg. Needs Assessment 1976 - Report to Flathead Valley Community College. Missoula, MT: Division of Educational Research, University of Montana, 1976.
- McGrath, G.D., and others. "Higher Education of Southwestern Indians with Reference to Success and Failure." Journal of American Indian Education, 4, No. 1 (1965), 5-13.
- McLaughlin, Gerald, Kevin Hunt, and James Montgomery. "Socioeconomic Status and Career Aspirations and Perceptions of Women Seniors in High School." Vocational Guidance Quarterly, 25 (1976), 155-62.
- Miller, D.C., and W.H. Form. Industrial Sociology. New York: Harper and Rowe, 1951.
- Moerk, Ernest. "Age and Epogenic Influences on Aspirations of Minority Group Children." Journal of Counseling Psychology, 21 (1974), 294-98.
- Moyer, Mike, and others. Flathead Indian Reservation: A Preliminary Planning Study. San Francisco: Enplan Corporation, 1973.
- Oberle, Wayne, Kevin Stowers, and James Darby. "Family Income and Status Orientations of Ozark Youth." Youth and Society, 6 (1974), 91-103.
- Ohlendorf, George, and William Kuvelsky. A Bibliography of Literature on Status Aspirations and Expectations: Educational, Residence, Income and Family Orientations. College Station, TX: Texas A&M University, 1966.
- Osipow, Samuel. Theories of Career Development. New York: Appleton-Century-Crofts, 1968.
- Osipow, Samuel. "The Relevance of Theories of Career Development to Special Groups: Problems, Needed Data and Implications." Career Behavior of Special Groups, eds. Steven Picou and Robert Campbell. Columbus: Merrill Publishing Company, 1975.
- Overall Economic Development Plan. Dixon, MT: Economic Development Administration, Confederated Salish and Kootenai Tribes, 1974.
- Parson, F. Choosing A Vocation. Boston: Houghton-Mifflin, 1909.

- Patton, Walter, and Everett Edington. "Factors Related to the Persistence of Indian Students at the College Level." Journal of American Indian Education, 12, No. 3 (1973), 19-23.
- Pentecoste, Joseph. "Occupational Levels and Perceptions of the World of Work in the Inner City." Journal of Counseling Psychology, 22 (1975), 437-39.
- Picou, Steven, and Robert Campbell, eds. Career Behavior of Special Groups. Columbus: Merrill Publishing Company, 1975.
- Picou, Steven, and William Howard. Motivational Determinants of Status Aspirations: Comments on Sex Variations, U.S., Educational Information Resources Center, ERIC Document ED 144 763, 1976.
- Picou, Steven, and others. Race-Sex Variations in the Dynamics of Status Attainment as Related to Aspiration Formation: A Casual Analysis, U.S., Educational Resources Information Center, ERIC Document ED 111 539, 1974.
- Picou, Steven, and others. The Social Psychologies of Blacks and Whites: Different Paths to Educational Achievement, U.S., Educational Resources Information Center, ERIC Document ED 070 560, 1972.
- Pierce, Toniетта. Fiscal Year 1975 Statistics Concerning Indian Education, U.S., Bureau of Indian Affairs Report. Lawrence, KS: Haskell Indian Junior College Publications Service, 1975.
- Pierce, Toniетта. Fiscal Year 1976 Statistics Concerning Indian Education, U.S., Bureau of Indian Affairs Report. Lawrence, KS: Haskell Indian Junior College Publications Service, 1976.
- Pietrofesa, John, and Howard Splete. Career Development: Theory and Research. New York: Greene and Stratton, 1975.
- Powell, Kathryn. Educational and Vocational Goals of Urban and Negro Youth in South Carolina, U.S., Educational Resources Information Center, ERIC Document ED 056 188, 1970.
- Rehberg, Richard, and David Westby. "Parental Encouragement, Occupation, Education and Family Size: Artifactual or Independent Determinants of Adolescent Expectations." Social Forces 45 (1967), 362-74.

Reiss, Albert, Jr. Occupations and Social Status. New York: The Free Press of Glencoe, Inc., 1961

Reissman, Leonard. "Levels of Aspiration and Social Class." American Sociological Review, 18 (1953), 233-42.

Roe, Anne. The Psychology of Occupations. New York: John Wiley and Sons, 1956.

Roulstan, Sally. Survey of Attitudes and Perceptions - Alaska BIA Boarding School Students, U.S., Educational Resources Information Center, ERIC Document ED 119 902, 1971.

Salter, Nancy, and William Falk. "The Stability of Status Orientations Among Young, White, Rural Women from Three Southern States." Journal of Vocational Behavior, 12 (1978), 20-32.

Schwarzweiler, Harry, and Thomas Lyson. "Social Class, Parental Interest and the Educational Plans of American and Norwegian Rural Youth." Sociology of Education, 47 (1974), 443-65.

Selinger, Alphonse. The American Indian High School Dropout: The Magnitude of the Problem. Portland: Northwest Regional Laboratory, 1968.

Seventy-Five Thousand High School Seniors: Their Educational and Vocational Plans - Results of A Survey of Indians' High School Senior Class of 1969, U.S., Educational Resources Informational Center, ERIC Document ED 080 894, 1969.

Sewell, William, A. Haller, and M. Strauss. "Social Status and Educational and Occupational Aspirations." American Sociological Review, 22 (1957), 67-73.

Sewell, William, and Vimil Shah. "Parents' Education and Children's Educational Aspirations and Achievements." American Sociological Review, 33 (1968), 191-209.

Sewell, William, and Vimil Shah. "Socioeconomic Status, Intelligence and the Attainment of Higher Education." Sociology of Education, 40 (1967), 1-23.

Sherarts, Karon. Menominee Parents and the Education of Menominee Children, Educational Resources Informational Center, ERIC Document ED 082 874, 1972.

- Simmons, Roberta, and Morris Rosenberg. "Functions of Childrens' Perception of the Stratification System." American Sociological Review, 36 (19/1), 235-49.
- Simpson, Richard. "Parental Influence, Anticipatory Socialization and Social Mobility." American Sociological Review, 27 (1962), 517-22.
- Smith, Brandon, and Edith Jilcoa. The Relationship of Selected Factors to the Occupational - Educational Choices of Twelfth Grade Students, U.S., Educational Resources Information Center, ERIC Document ED 052 370, 1971.
- Sollie, Ray, and Mike Lightsey. Occupational Aspirations and Early Attainment of Southern Youth, U.S., Educational Resources Information Center, ERIC Document ED 094 914, 1974.
- Spencer, Barbara. "Study of Occupational Aspirations and Expectations of Choctaw High School Students." BIA Educational Research Bulletin, 3, No. 1 (1976), 1-4.
- Stanbury, W.T. "Comparison of On and Off Reserve Educational Achievements." Journal of American Indian Education, 12, No. 3 (1973), 24-33.
- Super, D.E. "A Theory of Vocational Development." American Psychologist, 8 (1953), 185-90.
- Thomas, Gail. Race and Sex Effects on Access to College, U.S., Educational Resources Information Center, ERIC Document ED 143 747, 1977.
- Thomas, Mark. "Realism and Socioeconomic Status (SES) of Occupational Plans of Low SES Black and White Male Adolescents." Journal of Counseling Psychology, 23 (1976), 46-49.
- Tiedeman, David, and Robert O'Hara. Career Development: Choice and Adjustment. New York: College Entrance Examination Board, 1963.
- U.S., Commission on Civil Rights. Social Indicators of Equality for Minorities and Women. Washington: Government Printing Office, 1978.

- U.S. President, 1969-1973 (Nixon). Self-Determination Without Termination: A Message to Congress, 91st Cong., 2nd Sess., (Washington: Government Printing Office, 1970).
- Uzell, Odell. "Occupational Aspirations of Negro Male High School Students." Sociology and Social Research, 45 (1961), 202-04.
- Venegas, Moise. "Educational and Occupational Aspirations and Expectations of El Paso High School Students." Doctoral dissertation, New Mexico State University, 1973.
- Voyich, Daniel. "A Study of Selected Characteristics of Successful and Unsuccessful American Indian Students Enrolled at Montana State University From September 1967 to June, 1972." Doctoral dissertation, Montana State University, 1974.
- Wall, Charles. "Graduating Senior Options Kotzebue High School." BIA Education Research Bulletin, 4, No. 12 (1976), 1-2.
- White, Janet. "Dropout Study." Dixon, MT: U.S., Bureau of Indian Affairs Report, 1964.
- Wijting, Jan, Carole Arnold, and Kelley Conrad. "Generational Differences in Work Values Between Parents and Children and Boys and Girls Across Grade Levels 6, 9, 10 and 12." Journal of Vocational Behavior, 12 (1978), 245-60.

APPENDIX

Questionnaire

APPENDIX

EDUCATIONAL AND OCCUPATIONAL EXPECTATIONS OF HIGH SCHOOL STUDENTS

High School Student Survey Form

TO THE HIGH SCHOOL STUDENT:

This survey is designed to determine the educational and career plans of high school sophomores and seniors. Our goal is to provide useful educational programs that will meet your needs and plans. In order to develop useful programs and practices, we need to know about your plans and background.

THIS IS NOT A TEST:- No one in your school will ever see your responses. We are not interested in how many students answer questions each way. Your name is not on the answer sheet because we want to protect your privacy as an individual.

You do not have to answer any questions you do not want to. The more information you give us, the better our chances are of developing programs that will meet your educational and career plans. We hope you will answer all the questions you can.

We appreciate your help and thank you very much.

High School Student Survey Form

- | | |
|---|--|
| 1. Which sex are you?
(Reliability test - coefficient of correlation was 1.0) | 1. ☐ Female
2. ☐ Male |
| 2. What school grade are you in?
(Reliability test - coefficient of correlation was 1.0) | 1. ☐ Tenth
2. ☐ Twelfth |
| 3. Which of the following are you?
(Reliability test - coefficient of correlation was 1.0) | 1. ☐ American Indian
2. ☐ White/Caucasian
3. ☐ Other (please specify) _____ |

4. What high school are you attending?
(Reliability test - coefficient of correlation was 1.0)

1. _____ Arlee
2. _____ Charlo
3. _____ Hot Springs
4. _____ Polson
5. _____ Ronan
6. _____ St. Ignatius
7. _____ Two Eagle River School

5. How far in school do you expect to go? Check one only
(Reliability test - coefficient of correlation was .9614)

1. _____ I expect to quit school soon.
2. _____ I expect to graduate from high school.
3. _____ I expect to go to a vocational school or a two year (community) college.
4. _____ I expect to go to a four year college for awhile.
5. _____ I expect to graduate from a four year college.
6. _____ I expect to do graduate work after graduating from a four year college.

6. What occupation (job) do you expect to enter after you complete your education? Example: lumber mill foreman, school teacher, dentist, homemaker.
(Reliability test - coefficient of correlation was .7501)

PLEASE ANSWER EACH OF THE FOLLOWING QUESTIONS THAT APPLY TO YOU. IF A QUESTION DOES NOT APPLY TO YOU, SKIP IT AND GO ON TO THE NEXT QUESTION.

7. How far did your father (step-father or male guardian) go in school?
Check one only.
(Reliability test - coefficient of correlation was .9376)

1. _____ Completed 9 grades or less.
2. _____ Completed grades 10 or 11.
3. _____ Graduated from high school.

7. (continued)

4. ☐ Attended a business or trade school or two year (community) college.
 5. ☐ Attended a four year college but did not graduate.
 6. ☐ Graduated from a four year college.
 7. ☐ Did graduate work after graduating from a four year college.
-

8. What is your father's (stepfather's or male guardian's) occupation? (Reliability test - coefficient of correlation was 1.0)

9. How far did your mother (stepmother or female guardian) go in school? Check one only. (Reliability test - coefficient of correlation was .9953)

1. ☐ Completed 9 grades or less.
 2. ☐ Completed 10 or 11.
 3. ☐ Graduated from high school.
 4. ☐ Attended a business or trade school or two year (community) college.
 5. ☐ Attended a four year college but did not graduate.
 6. ☐ Graduated from a four year college.
 7. ☐ Did graduate work after graduating from college.
-

10. What is your mother's (step-mother's or female guardian's) occupation? (Reliability test - coefficient of correlation was .8885)

11. My family's (parents, step-parents or guardians) annual income is:

Check one only.

(Reliability test - coefficient of correlation was .9171)

- | | | |
|----|--------------------------|----------------------|
| 1. | ☐ | Under \$7,000. |
| 2. | ☐ | \$7,001 to \$15,000. |
| 3. | ☐ | Above \$15,000. |

12. How many people are supported by your family's annual income?

Check one only.

(Reliability test - coefficient of correlation was .9859)

- | | | |
|----|--------------------------|------------|
| 1. | ☐ | 3 or less. |
| 2. | ☐ | 4 |
| 3. | ☐ | 5 |
| 4. | ☐ | 6 |
| 5. | ☐ | 7 |
| 6. | ☐ | 8 |
| 7. | ☐ | 9 or more. |

MONTANA STATE UNIVERSITY LIBRARIES



3 1762 10011146 5