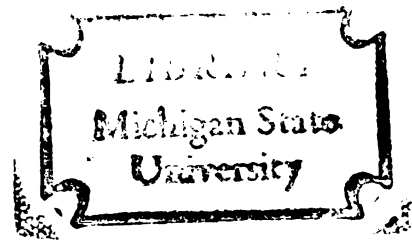


AN EXAMINATION OF THE LEVEL OF OCCUPATIONAL
ASPIRATIONS OF STUDENTS AND PARENTS FOR
STUDENTS IN SELECTED DEPARTMENT OF
DEFENSE DEPENDENTS SCHOOLS

Dissertation for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY
THOMAS R. RILEY
1977



This is to certify that the

thesis entitled

AN EXAMINATION OF THE LEVEL OF OCCUPATIONAL
ASPIRATIONS OF STUDENTS AND PARENTS FOR
STUDENTS IN SELECTED DEPARTMENT OF
DEFENSE DEPENDENTS SCHOOLS

presented by

Thomas R. Riley

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Education

Major professor

Date May 22, 1977

ABSTRACT

AN EXAMINATION OF THE LEVEL OF OCCUPATIONAL ASPIRATIONS OF STUDENTS AND PARENTS FOR STUDENTS IN SELECTED DEPARTMENT OF DEFENSE DEPENDENTS SCHOOLS

By

Thomas R. Riley

This study was to assist the Department of Defense (DOD) Schools in providing a meaningful educational program by:

1. collecting and analyzing data concerning the occupational aspirations of and for dependent students of DOD personnel employed in Japan and Korea, and
2. providing recommendations for developing career exploratory and vocational education programs for secondary students.

Haller and Miller's Occupational Aspiration Scale (OAS) was administered to all eighth and twelfth grade students in Japan and Korea. Twenty percent of the students' parents were surveyed.

Main effects and interactions were examined through an analysis of variance, 2 x 2 x 2 factorial design;

the t ratio was also computed. For each statistical test employed, the .05 confidence level was required to not retain the null hypothesis.

The respondent main effect of the analysis of variance revealed that:

1. Parents achieved higher OAS scores than did students.
2. There were no significant differences in OAS scores by grade level. A similarity existed between the occupational aspirations of eighth grade students and parents and twelfth grade students and parents.
3. Boys and parents of boys achieved higher OAS scores than did girls and parents of girls.
4. The four interactions calculated by the analysis of variance had F values less than 3.84.

The data analyzed in this study suggest that:

1. Although the OAS has been validated for students, it is not entirely valid for current times. However, it is the best available instrument.
2. The occupational aspirations which parents have for eighth and twelfth graders do not affect the occupational aspirations which the students of District I DOD Schools have for

themselves from the eighth grade to the twelfth grade.

3. There must be operative factors before the eighth grade which cause differences in OAS scores, boys scoring higher.
4. There appear to be no effective equalizing influences which affect students' and parents' OAS scores from the eighth grade to the twelfth grade.
5. The lack of interaction between OAS scores demonstrates that apparently equal amounts of parental encouragement/discouragement are placed upon boys and girls at the eighth grade and the twelfth grade levels.

The recommendations are that:

1. A sound testing program--including measures of occupational aspiration, ability, achievement, and vocational interest--should accompany the career education program in the secondary schools in District I DOD Schools, Pacific.
2. An active counseling program should be instituted to assist students in making career choices. Parents should be included.
3. Follow-up evaluation and monitoring should be conducted.

Thomas R. Riley

4. District I DOD Schools, Pacific should study curriculum to determine if it is sex-stereotyped and/or if it favors boys over girls.
5. District I DOD Schools, Pacific should encourage students to aspire to the occupational goals most suited to their abilities, interests, and aspirations.
6. The work-study program should be altered and expanded to meet the needs of students requiring career-exploration experiences.
7. The OAS instrument should continue to be used as an occupational education information-gathering device until a more current reliable and valid instrument becomes available.

AN EXAMINATION OF THE LEVEL OF OCCUPATIONAL
ASPIRATIONS OF STUDENTS AND PARENTS FOR
STUDENTS IN SELECTED DEPARTMENT OF
DEFENSE DEPENDENTS SCHOOLS

By

Thomas R. Riley

A DISSERTATION

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

DOCTOR OF PHILOSOPHY

Department of Secondary Education and Curriculum

1977

To Janet, Keith, and Carrie.

Without their sacrifices, completion of
this project could not have been possible.

ACKNOWLEDGMENTS

My sincere appreciation is extended to the following contributors to this study:

- Academic advisor and dissertation director,
Dr. Helen Green.
- Guidance committee members: Dr. Lawrence
Borosage, Dr. Richard Gardner, and Dr. Samuel
Moore.
- Director of Department of Defense Dependents
Schools, Dr. Edward Killin.
- Superintendent of District I/DPN I,
Dr. Robert Lundgren.
- Department of Defense Dependents Schools,
principals, teachers, parents, and students.

TABLE OF CONTENTS

	Page
LIST OF TABLES	vi
LIST OF FIGURES	vii
 Chapter	
I. INTRODUCTION	1
Background of the Problem	1
Statement of the Problem	8
Hypotheses to Be Tested	10
Statistical Procedures Employed	11
Assumptions and Limitations of the Study	11
Definitions	13
Overview	15
II. REVIEW OF RELATED LITERATURE	16
Introduction	16
Review of Related Literature	17
Summary	29
III. METHODOLOGY	32
Research Approval	32
Research Instrument	33
Pilot Project	35
Population and Sample	36
Data Collection	39
Statistical Procedures	40
IV. ANALYSIS OF THE DATA	41
Hypothesis I	43
Hypothesis II	45
Hypothesis III	47
Hypothesis IV	49
AB Interaction	49
AC Interaction	51
BC Interaction	51
ABC Interaction	53

Chapter	Page
V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS .	54
Summary	54
Conclusions	62
Recommendations	63
APPENDICES	65
A. PERMISSION LETTER, PACIFIC AREA	66
B. PERMISSION LETTER, DISTRICT I/DPN I JAPAN AND KOREA	69
C. LETTER TO PRINCIPALS	71
D. PARENT LETTER AND QUESTIONNAIRE	74
E. STUDENT QUESTIONNAIRE AND ANSWER SHEET . .	81
SELECTED BIBLIOGRAPHY	81

LIST OF TABLES

Table	Page
1. Student Enrollment and Parent Sample by School for Year 1974-75	37
2. Summary of Student and Parent Responses for Year 1974-75	38
3. Analysis of Variance Summary Table for Main Effect	42
4. t-Test Data for Seven Respondent Comparison Groups	44
5. t-Test Data for Six Grade Level Comparison Groups	46
6. t-Test Data for Six Sex Comparison Groups . .	48

LIST OF FIGURES

Figure	Page
1. Model for Career Education for the DOD Schools, Pacific	3
2. Mean Scores of Students and Parents for Students at Each Grade Level	50
3. Mean Scores of Students and Parents for Students by Sex of Students	50
4. Scores of Eighth and Twelfth Grade Students and Parents for Students by Sex of Students	51
5. Analysis of Variance Table for Main Effect Student and Parent by Grade by Sex	52

CHAPTER I

INTRODUCTION

Background of the Problem

The philosophic premise of Career Education for the Pacific Area Department of Defense Schools, hereinafter designated as DOD Schools, is that "Career Education is the delivering of skills to all students which will provide them with the ability to explore, understand, and perform in their life roles while learning, working, and living."¹

The main thrust of Career Education in DOD Schools, Pacific, is to prepare all students for a successful life role by increasing their options for occupational choice; by eliminating barriers (real and imagined) that prevent, thwart, and block the attainment of job skills; and by enhancing learning achievement in all subject areas at all levels of education.²

The implementation of Career Education is a means of bringing new life to the educational process. Education can be exciting, meaningful, and rewarding. If education can demonstrate its importance and the

¹Department of Defense Dependents Schools, Pacific, Career Education, An Integrated Approach (Area Curriculum Center/DPNC, APO S.F. 96323, July 1972), p. 1.

²Ibid., p. 5.

contributions it can make to the future life role of the individual, it becomes self-motivating.

Students no longer exhibit tolerance toward teacher presentations of curricula just for the sake of general knowledge. Some DOD students of today are asking, "How will this information help me now?" and "How will it help me get a job later on?" Students are asking for instruction relevant to the working world in which they are or will be involved.

A review of the model of career education (Figure 1) accepted by the DOD Schools, Pacific, will reveal that it is the responsibility of the high school to prepare students to enter and successfully complete: (1) a college program, or (2) a post high school technical program, or (3) exit the formal educational system with a salable skill.

The career education model (Figure 1) was adapted specifically to meet needs of the DOD Schools, Pacific. It presupposes that the different phases of career education, career awareness, career exploration, and career preparation take place at specific grade levels. No provisions for career development recycling are built into the model.

Statistics indicating how well the secondary DOD Schools, Pacific, are accomplishing these obligations are not available. Notwithstanding this lack of

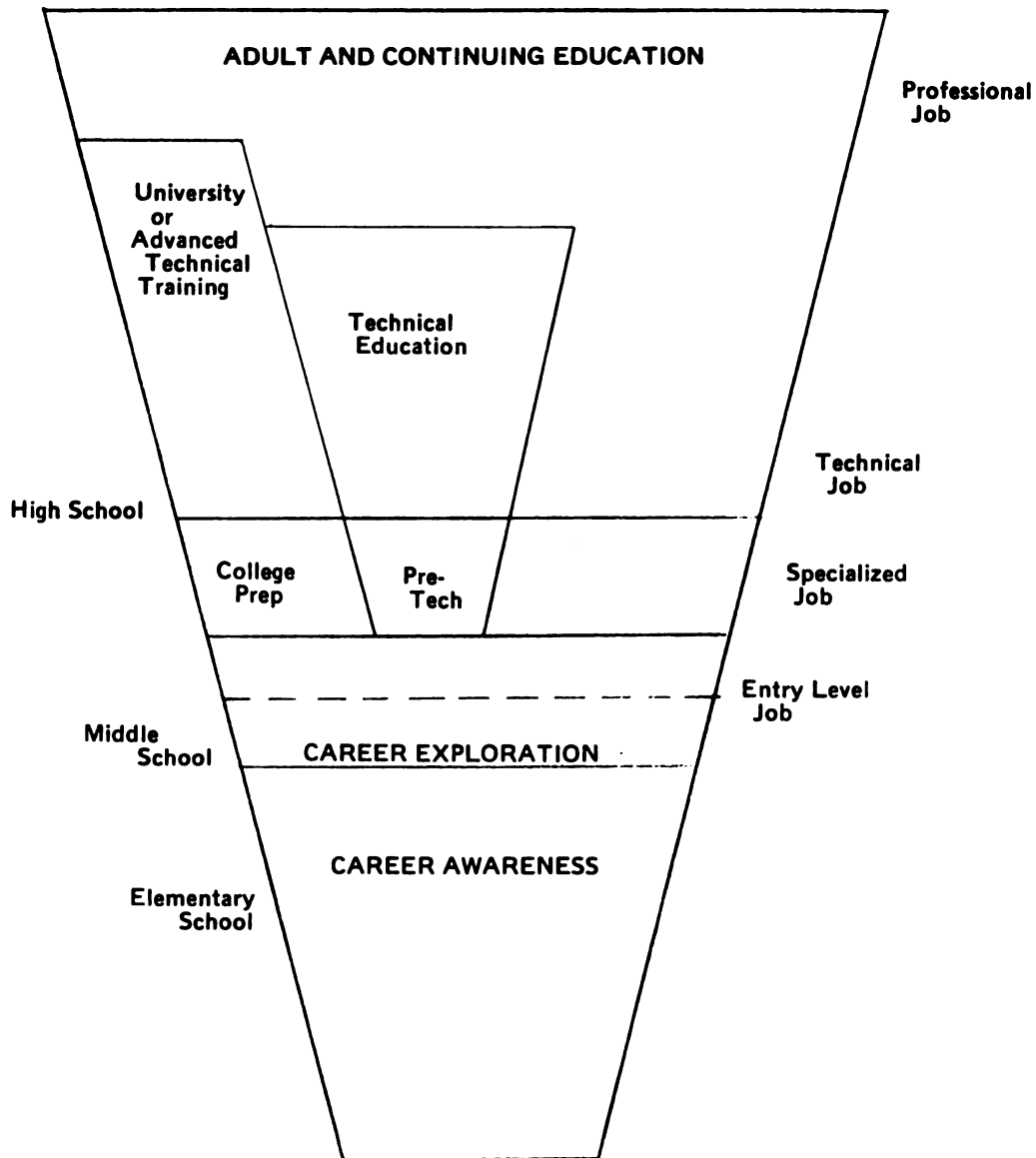


Figure 1. Model for career education for the
DOD Schools, Pacific

Source: Department of Defense Dependents Schools, Pacific, Career Education Handbook K-12 (DOD Schools, Pacific, Area Curriculum Center/DPNC, APO 96323, July 1972), p. 141. Based on Bruce Reinhart, "Career Education and the Comprehensive Career Education Model," paper presented at the Annual Convention of the American Vocational Association, Portland, Oregon, December 5, 1971.

data, it is the researcher's belief that programs designed for college-bound students are meeting their obligation satisfactorily. However, certain students who are enrolled in the college education curriculum may receive minimal value from them in their future life roles, because they may: (1) not attend college, or (2) fail to complete a four-year bachelorate degree program.

There are few educational programs providing alternatives to the college-bound curriculum in DOD Schools, Pacific. With the exception of work study and, in some cases, business education, there are no vocational education programs available for non-college-bound students. Curriculum offerings tend to be traditionally oriented toward either college or general education. Although career education is a K-12 approach and integration into the existing curriculum is basic in grades K-9, students in secondary schools are provided limited curriculum alternatives. The researcher feels it is imperative that educational programs be developed to provide career exploratory experiences, or vocational education, as alternatives to the college-bound curriculum in the DOD Schools.

Career development is a lifelong process, beginning in the preschool years and continuing, for most individuals, through retirement. It is the total

spectrum of events, circumstances, and experiences of an individual as he makes decisions about himself as a prospective and then actual member of the work force.³

It can be viewed as a process through which the individual progresses as he seeks a life style suitable to his needs. Occupational choice is a vital part of the process. And at different stages in the career development process, occupational choices are expressed in many forms and with many degrees of firmness. "Occupational choices, in a typical developmental process, move progressively from fantasy, to uncertainty, to conviction, and ultimately, the implementation stage."⁴

A variety of influences operate on occupational choice as the individual progresses through the various stages of career development. Drabick⁵ and Brook et al.⁶ attempted to determine the relationship of socioeconomic status and educational and occupational aspirations.

³Kenneth B. Hoyt, Rupert N. Evans, Edward R. Mackin, and Garth L. Mangum, Career Education, What It Is and How to Do It (Salt Lake City, Utah: Olympus Publishing Co., 1972), p. 100.

⁴Ibid., p. 101.

⁵Lawrence W. Drabick, "Factors Associated With Expectations; North Dakota High School Seniors," Educational Research Series No. 9 (Grand Forks, North Dakota: North Dakota University, Center for Teaching and Learning, July 1974), p. 35.

⁶Judith S. Brook et al., "Aspiration Levels of and for Children; Age, Sex, Race, and Socioeconomic Correlates," Journal of Genetic Psychology 124 (March 1974): 14.

In both studies there were findings that supported the evidence that (1) both parents' educational and occupational aspirations for their children were higher in the high socioeconomic groups than in the low socioeconomic groups and (2) the children in high socioeconomic groups had higher educational and occupational aspirations than those in low socioeconomic groups. Sostek⁷ suggests that there is a significant relationship between occupational choice and the sexuality of the parent with whom there exists the closest personal identification.

Holland⁸ approaches career development by predicting occupational choice based on the psychological meaning of one's aspirations. He found that a person's aspirations have considerable psychological meaning; their aspirations suggest decision-making ability, psychological integration, and predictability. His research discloses that occupational aspirations and future occupational choice are related. Frequently, occupational aspiration codes and interest inventories coincide. However, if aspirations and inventories

⁷Alan B. Sostek, "The Relation of Identification and Parent-Child Climate to Occupational Choice," Disser-tation Abstracts, 24:04-A, 1963.

⁸John L. Holland and Gary D. Gottfredson, "Applying a Typology to Vocational Aspirations" (Baltimore, Maryland: Center for the Study of Social Organization of Schools, June 1974).

diverge, occupational aspiration exerts the stronger influence on occupational choice.

According to Gleason,⁹ children of military and civilian personnel overseas tend to choose occupations permitting them to remain mobile. In his study of worldmindedness he found that over 50 percent of the Department of Defense students did not know where they wanted to establish their homes. Twenty-four percent of the students chose the United States, while another 17 percent opted for an area outside the United States. Only 2 percent of the Department of Defense students wanted their children in the United States during their teen years. Thus, a vocational education program restricting the future mobility of these individuals would be inappropriate.

According to Thelen,¹⁰ universal knowledge concerning (1) the nature of man, (2) the dynamics of learning, (3) factors affecting group performance, and (4) intergroup relations, social action, and community improvement has had little effect on educational practices. As a remedy for this unfortunate circumstance,

⁹Patrick T. Gleason, "Social Adjustment Patterns and Manifestations of Worldmindedness of Overseas-Experienced American Youth" (Ph.D. dissertation, Michigan State University, 1960).

¹⁰Herbert A. Thelen, Education and the Human Quest (New York: Harper and Brothers Publishers, 1960), p. 1.

Havelock¹¹ suggests that client involvement, which includes interested persons, parents, students, and groups, should be considered in determining educational goals in the school system. Since student involvement is a critical link in school planning, the educational system should be responsive to the needs and desires of its recipients.

Based on the above-mentioned research and opinions, it is evident that before program development can begin, the DOD Schools, Pacific, must address themselves to an examination of the needs and desires for educational programs which are career exploratory and vocational in nature. Obviously, the expenditure of large amounts of money and effort before determining the appropriate educational programs is both futile and absurd. Hopefully, as a result of this study, career exploratory and vocational education programs now serving as college preparatory alternatives may assume additional forms, variations, or dimensions not now contemplated for the secondary school system.

Statement of the Problem

The researcher's purpose in this study was to assist the DOD Schools in their attempt to resolve the

¹¹Ronald G. Havelock, The Change Agent's Guide to Innovation in Education (Englewood Cliffs, New Jersey: Educational Technology Publications, 1973), p. 66.

problem of providing a meaningful educational program relative to the needs of their recipients by:

1. collecting and analyzing data pertinent to the occupational aspirations of and for students who are dependents of military and civilian personnel employed by the Department of Defense in Japan and Korea, and from these findings:
2. providing recommendations for developing career exploratory and vocational education programs to serve their secondary students.

The primary problem was to determine if a significant difference exists between (1) the level of occupational aspiration of eighth grade students and that which parents of eighth grade students have for them, and (2) the level of occupational aspiration of twelfth grade students and that which parents of twelfth grade students have for them. Specifically, two major questions were addressed:

1. Is the level of occupational aspirations the same for:
 - a. boys and girls?
 - b. students and parents?
 - c. eighth and twelfth graders?
2. Is the level of occupational aspirations of students and that which parents have for

students stable from the eighth grade to the twelfth grade?

Hypotheses to Be Tested

Hypothesis I: There is no statistically significant difference in the scores on the Occupational Aspiration Scale made by student and parent respondents in terms of:

- a. Eighth grade boys and parents of eighth grade boys
- b. Eighth grade girls and parents of eighth grade girls
- c. Twelfth grade boys and parents of twelfth grade boys
- d. Twelfth grade girls and parents of twelfth grade girls
- e. All boys and all parents of boys
- f. All girls and all parents of girls
- g. All students and all parents

Hypothesis II: There is no statistically significant difference in the scores on the Occupational Aspiration Scale made by grade level for students and parents of students in terms of:

- a. Eighth grade boys and twelfth grade boys
- b. Eighth grade girls and twelfth grade girls
- c. Parents of eighth grade boys and parents of twelfth grade boys
- d. Parents of eighth grade girls and parents of twelfth grade girls
- e. All eighth grade students and all twelfth grade students
- f. All parents of eighth grade students and all parents of twelfth grade students

Hypothesis III: There is no statistically significant difference in the scores on the Occupational Aspiration Scale made by students and parents by sex of students in terms of:

- a. Eighth grade boys and eighth grade girls
- b. Twelfth grade boys and twelfth grade girls
- c. Parents of eighth grade boys and parents of eighth grade girls
- d. Parents of twelfth grade boys and parents of twelfth grade girls

- e. All boys and all girls
- f. All parents of boys and all parents of girls

Hypothesis IV: There is no statistically significant interaction effect on scores of parent and student respondents on the Occupational Aspiration Scale by sex of student, grade level, or any combination of these variables.

Statistical Procedures Employed

The statistical procedures employed in this study were those associated with a 2 x 2 x 2 analysis of variance factorial design. In addition to the F values obtained from the analyses of variance, additional analyses of the significance of comparison group mean scores required by the hypotheses were ascertained by use of the two-tailed t test. For all statistical analyses, the .05 level of confidence was required to not retain the null hypothesis.

Assumptions and Limitations of the Study

Haller and Miller's Occupational Aspiration Scale (OAS) was used to test the hypotheses.¹² This scale was used, predicated on the assumption that the OAS is a reliable and valid instrument for both boys and girls at the secondary level.

¹²Archibald O. Haller and Irwin W. Miller, The Occupational Aspiration Scale: Theory, Structure and Correlates (Cambridge, Massachusetts: Schendman Publishing Company, Inc., 1971).

The evidence Westbrook collected strongly suggests that the OAS is a reliable and valid measure of levels of occupational aspiration:

He found test-retest reliability coefficients over a period of two weeks and five weeks to be satisfactory. Hypotheses about the elevation of mean OAS item scores were partially supported. And, though boys and girls did not differ significantly on OAS total scores, the girls' scores showed less variability.¹³

This difference can be explained by the fact that at the extreme ends, the OAS is primarily for males, since the occupations at the ends have been traditionally selected by males; therefore females tend to choose occupations closer to the center of the occupational prestige hierarchy.

This study has the following limitations:

1. The population used for this study cannot be considered representative of larger or even other groups; therefore, no attempt is made to generalize beyond the scope of the study.

2. On the other hand, comparisons of OAS scores are made on groups, not individuals, and can be used only for generalization.

3. Since no endeavor was made to control the conditions under which the parental survey was conducted,

¹³B. W. Westbrook, "The Reliability and Validity of a New Measure of Level of Occupational Aspiration," Educational and Psychological Measurement 26 (1966): 1004.

individual bias is possible although instructions and sample questions were included.

4. Additionally, because no attempt was made to survey both parents nor to determine whether replies were made by one or both, the assumption is that the dominant parent is the one having the greatest influence on the child's level of occupational aspiration. Furthermore, the parent's response is not matched with that of the student.

5. Moreover, Haller's Occupational Aspiration Scale, not being a predictor of specific job preference, restricts its use for additional curriculum, except for general recommendations for middle and high school career exploratory or vocational programs.

Definitions

For the purpose of this study, the words, phrases, or terms set forth below are defined as follows:

The level of occupational aspirations is the career goal toward which a person aims, including the selection of one of the alternative behavior levels possible with respect to a career objective. Furthermore, the person's orientation is variable to the extent that its central tendency may be at any point or limited range of points along the continuum of difficulty.

The Department of Defense Dependents Schools are those sponsored by the Defense Department to provide K-12 educational services for sponsored dependents of military and civilian personnel.

The Pacific Area consists of those Department of Defense Dependents Schools located in Japan, Okinawa, Korea, Taiwan, the Philippines, and Midway.

The District I/DPN I are those Department of Defense schools in Japan and Korea.

Career education is the delivering of skills to all students which will provide them with the ability to explore, understand, and perform in their life roles while learning, working, and living.¹⁴

Life roles are those phases, such as learner, worker, member of a family unit, etc., which individuals pass through or recycle into during their life span.

Career exploration, as defined by Tennyson, comprises "those activities, both mental and physical, that purposely utilize the stimuli and information provided by work and the work world to perpetuate a continuing clarification of self, including one's needs, interests,

¹⁴Department of Defense Dependents Schools, Pacific, Career Education, p. 1.

attitudes, values, and work role perceptions and competencies."¹⁵

Vocational education is the practical training provided by the means of classes, laboratory, work experience, or cooperative work experience/work study programs designed to develop knowledge, skills, abilities, attitudes, and work habits which will enable the individual to enter into gainful employment.

Overview

In Chapter II, the literature relevant to this study is reviewed. In Chapter III the writer presents the design of the study including the sample, instrumentation, and the analyses techniques. The results of these analyses are presented in Chapter IV, and the summary and conclusions of the study appear in Chapter V.

In this study, the occupational aspirations of eighth and twelfth grade students and their parents are described. Differences are measured and presented for comparison in the hope that they can be used for career-oriented educational program recommendations.

¹⁵W. Wesley Tennyson, "Career Exploration," in Career Education, ed. J. H. Magisos (Washington, D.C.: The American Vocational Association, Inc., 1973), p. 104.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

In this chapter the researcher reviews the literature pertinent to the following questions:

1. What influence, if any, do parents have on their children's future career selections?
and
2. Are the career aspirations of children realistic/obtainable goals?

A computer search of the Educational Research Information Center (ERIC), using descriptors such as occupational aspiration, career choice, occupational choice, parental aspiration, parental influence, and secondary students, isolated fifty-two studies and articles related to these questions. Similarly, a DATRIX II search of university microfilms using key words such as occupational, aspiration, student, career, goal, and parent identified eighty-two doctoral dissertations relevant to these inquiries. And from these 134 studies and articles, twenty-three are reviewed.

Review of Related Literature

Research relative to the questions propounded in the introduction was conducted as early as 1935, when Kroger and Louttit¹ found that the father's occupation had no influence on the first occupational choice of high school boys. However, when asked to make more than one choice, the boys tended to select their father's occupation as their third choice. The authors speculated that:

Perhaps, when confronted with the problem of making a choice, the boys select the vocation offering the greatest appeal due to some recent experience. But when required to make further choices, many boys turn to their father's occupation.²

More positively, Warren's³ study of the boys' role in the family setting revealed that sons select their father's occupation provided such selection facilitates role congruence. That is, the father's occupation is chosen where it reduces family problems or eases the position sons face as a family member.

¹Robert Kroger and C. M. Louttit, "The Influence of Fathers' Occupation on the Vocational Choice of High School Boys," The Journal of Applied Psychology 19 (April 1935): 208.

²Ibid., p. 209.

³Rachelle Claire Barus Warren, "Parent Structure, Children's Roles, and Occupational Choice: Variations on a Theme of Role Congruence," Dissertation Abstracts, 32:07-A, 1971.

In their investigation of wage earners, Bendix, Lipset, and Malm⁴ explored, among other things, the variables of family background, education, area shifts, and job history after schooling as related to intergenerational occupational mobility. They reported that a disadvantaged family background restricts later occupational opportunities. Generally, technical interest is associated with low economic status, while those with business interests come from high-income families. Berdie⁵ pointed out that there is a relationship between fathers' occupations and sons' vocational interest profiles. Sons of manual workers have a greater likelihood of being in manual vocations. And though many sons of professionals pursue lower-status occupations, more than half work at high-status jobs. Thus, the probability of attaining a high-status occupation is increased by middle-class antecedents.

The objective of Ganann's⁶ research was to determine how certain variables (race, socioeconomic

⁴Reinhard Bendix, Seymour M. Lipset, and T. T. Malm, "Social Origin and Occupational Career Patterns," Industrial and Labor Relations Review 7 (January 1954): 249.

⁵Ralph F. Berdie, "Factors Associated With Vocational Interest," Journal of Educational Psychology 34 (May 1943): 273.

⁶Jan W. Ganann, "Educational and Occupational Aspirations and Expectations of Post-Secondary Vocational-Technical School Students in Mississippi," Dissertation Abstracts, 37:07-A, 1977.

status origins, age, and significant others' influence) relate to occupational and educational aspirations and expectations. Ganann concluded that:

1. educational aspirations and expectations are higher among blacks than whites;
2. occupational aspirations appear to be similar between the races, while expectations are slightly higher for whites; and
3. environmental (status) origins play a greater part in determining the nature and extent of the black respondents' status projections than of the white respondents.

Slocum's⁷ study revealed that the most important factor directing girls toward a specific occupation was their work experience. They also tended to rank, in order, parents, teachers, and peers as significant influences on their career selection. However, many girls failed to list any individuals as important.

A study by Sewell, Haller, and Straus⁸ supported the findings of Bendix and Berdie (supra). While stabilizing the effect intelligence exerts on career

⁷W. L. Slocum, "Occupational Decision-Making by High School and College Girls," Family Life Coordinator 5 (December 1956): 50.

⁸William H. Sewell, A. O. Haller, and M. A. Straus, "Social Status and Educational and Occupational Aspiration," American Sociological Review 22 (February 1957): 69.

choice, they examined the socioeconomic status and occupational aspiration of 4,167 non-farm seniors. Their conclusion was that the effects of socioeconomic status remained strong though intelligence was partialled out.

In his article, "Predicting Vocational Plans of High School Senior Boys," Porter⁹ related three background variables to vocational plans:

1. prestige of father's occupation,
2. mental ability, and
3. emotional adjustment.

He found that both mental ability and father's occupation relate to vocational plans, with the father's occupation exerting the stronger influence. And though the boys selected a broad array of occupations, the average level of their projected jobs was not loftier than their father's occupational level.

Two independent projects conducted by Drabick¹⁰ and Brook¹¹ using (1) first and fifth grade students and

⁹Richard J. Porter, "Predicting Vocational Plans of High School Senior Boys," The Personnel and Guidance Journal 33 (December 1954): 216.

¹⁰Lawrence W. Drabick, "Factors Associated With Expectations: North Dakota High School Seniors," Educational Research Series No. 9 (Grand Forks, North Dakota: North Dakota University, Center for Teaching and Learning, July 1974), p. 35.

¹¹Judith S. Brook et al., "Aspiration Levels of and for Children: Age, Sex, Race, and Socioeconomic Correlates," Journal of Genetic Psychology 124 (March 1974): 14.

(2) high school seniors attempted to determine the relationship of socioeconomic status and educational and occupational aspirations. In both cases, the findings supported the following facts:

1. Both parents' educational and occupational aspirations for their children were higher in the upper socioeconomic groups, and
2. Children of upper socioeconomic groups have higher educational and occupational aspirations than lower socioeconomic groups.

It was also found in the Brook study that:

1. Upper socioeconomic students report that parents encouraged them to attend college,
2. Middle-class students are more concerned than lower class with the importance of education, and
3. Substantially fewer middle-class parents than lower-class parents recommend skilled labor for their children.

Cutright's¹² and Cohen's¹³ research coincided with the results of Drabick's and Brook's projects.

¹²Phillip Cutright, "Students' Decision to Attend College," Journal of Educational Sociology 33 (February 1960): 290-99.

¹³Elizabeth F. Cohen, "Parental Factors in Educational Mobility," Sociology of Education 33 (Fall 1965): 404-24.

Cutright, using high school students, reported that prominent occupational status of the father correlated significantly with the father's superior educational attainment. Thus, either esteemed occupation or education of the father bears a reciprocal relation to the college plans of his offspring. But it is the affluent socioeconomic status rather than the father's quality education which predicts more accurately who actually attends college. In addition, Cohen revealed that even the responsibility of the father's occupation or the white-collar background of the mother has some effect on the lofty aspirations of their sons. Furthermore, vocation orientation is of more concern to fathers, while concern for status aspects of college is more characteristic of mothers.

In another study involving ninety-six college men and women and their parents, Sostek¹⁴ attempted to test hypotheses based on a personality theory regarding the relationship between identification with a parent and the effect of this identification upon occupational choice. He ascertained that greater identification by the student with either parent is related to later choice of occupation. That is, occupations are chosen

¹⁴Alan B. Sostek, "The Relation of Identification and Parent-Child Climate to Occupational Choice," Dissertation Abstracts, 24:04-A, 1963.

representing the sex classification of the parent with whom there is greater identification. For example, a son who identifies with his mother is more apt to choose an occupation feminine-oriented, such as nursing, stenography, hairdressing, rather than masculine-oriented, such as truck driver, mechanic, or construction worker. And girls who identify with their fathers are more prone to choose an occupation which is more masculine-oriented, such as drafting, para-legal, or telephone repairperson.

Esslinger¹⁵ explored the educational and occupational aspirations and expectations of 340 twelfth-grade girls and their personal, educational, and family characteristics which influence aspirations and expectations. He concluded that:

1. Plans for continued education beyond high school were related to curriculum in school, grades, extra-curricular activities, and the level of parents' education;
2. Occupational choice was related to curriculum in school, grades, extra-curricular activities, and the level of parents' occupation; and

¹⁵Carl W. Esslinger, "Educational and Occupational Aspirations and Expectations and the Educational, Personal, and Family Characteristics of Selected Twelfth Grade Female Students," Dissertation Abstracts, 37:01, 1976.

3. The majority of students who indicated an occupational choice were realistic about the amount of education needed for that occupation.

There seems to be a general consensus that parents influence their children's occupational decisions through their attitudes toward and identification with their children. In 1957, Roe¹⁶ introduced the theory that, generally, an individual who experiences a warm and loving family relationship is attracted to occupations which are people oriented. Opposite treatment tends to cause occupational interest in non-people-oriented careers.

Contrariwise, in his study concerning parental attitude and identification, Brunkan¹⁷ did not find support for Roe's theory. Brunkan, using 298 undergraduate college men at the University of Iowa, conducted tests for probable occupational choice hypothesizing that choices in:

1. service, general cultural, arts, and entertainment are associated with a greater degree of parental concentration;

¹⁶Ann Roe, "Early Determinants of Vocational Choice," Journal of Counseling Psychology 4 (Fall 1957): 212-17.

¹⁷Richard J. Brunkan, "Perceived Parental Attitudes and Parental Identification in Relation to Field of Vocational Choice," Journal of Counseling Psychology 12 (Spring 1965): 39-47.

2. technological occupations are accompanied by a high degree of parental acceptance; and
3. scientific careers are connected with considerable parental avoidance.

In his conclusions, Brunkan could not find support for his hypotheses nor Roe's theory.

In a monograph entitled "The Origin of Interest," Roe and Siegelman¹⁸ reported on two studies dealing with a bipolar dimension of person orientation or non-person orientation and tried to relate the person orientation positively to the amount of love and attention received early in life. They concluded that the results of the two studies were mixed and did not support the person/non-person position as previously stated.

Although Lambert's¹⁹ research fails to support Roe's theory, she did find relationships between a girl's occupational choice and her relationships with her parents. Using a revision of "Roe-Siegelman Parent-Child Relations Questionnaire," developed for adolescent girls, Lambert discovered that girls are oriented toward

¹⁸Ann Roe and Marian Siegelman, "The Origin of Interest," American Personnel Guidance Association, Inquiry Studies 1 (1964).

¹⁹Geraldine B. Lambert, "A Revision of the Parent-Child Relations Questionnaire to Investigate Roe's Occupational Choice Theory With Adolescent Girls," Dissertation Abstracts, 27:06-A, 1966.

non-person occupations more predominantly than toward person occupations provided:

1. relationships with the mother are cold, rejecting, and demanding; or
2. relationships with the father are loving and rewarding.

Two researchers, Eli Ginzberg²⁰ and Donald Super,²¹ presented theories of vocational choice in 1951 and 1953, respectively. Ginzberg, in his article, "Toward a Theory of Occupational Choice," stated that there are three basic elements in the occupational choice process:

1. It takes place over a period of time,
2. It is largely irreversible, and
3. It ends in a compromise between interest, capacities, values, and opportunity.²²

Super's "A Theory of Vocational Development" consists of ten elements. Two of these elements that are of particular interest to this review are:

1. vocational preference and competencies, and
2. the nature of the career pattern.²³

²⁰Eli Ginzberg, "Toward a Theory of Occupational Choice," Personnel and Guidance Journal 30 (1952): 491-95.

²¹Donald E. Super, "A Theory of Vocational Development," American Psychologist 8 (1953): 185-90.

²²Ginzberg, "Toward a Theory."

²³Super, "Theory of Vocational Development."

Super hypothesized that the circumstances in which people live and work, and hence their self-concepts, change with time and experience, making choice and adjustment a continuous process. The nature of the career pattern--that is, the occupational level attained and the sequence, frequency, and duration of trial and stable jobs--is determined by the individual's parental socioeconomic level, mental ability, personality characteristics, and the opportunities to which one is exposed.

O'Reilly's²⁴ sample consisted of 550 ninth graders for whom occupational choice data (as expressed by these students) through twelfth grade were available. After examining the stability of occupational choice expressed by these students, O'Reilly concluded that stability is unpredictable, because secondary students are not vocationally mature enough to make stable occupational choices.

Copes²⁵ attempted to determine if high school graduates were entering into the career choices that they had predicted as high school seniors. Specific attention was directed toward the career choices which individuals made as high school seniors, and the actual

²⁴Patrick A. O'Reilly, "Predicting the Stability of Expressed Occupational Choices of Secondary Students," Dissertation Abstracts, 35:01-A, 1971.

²⁵Marvin Lee Copes, "The Predictability of Career Choices of High School Seniors," Dissertation Abstracts, 37:03-A, 1976.

occupations entered into by the graduates four years later. Copes concluded that the graduates did change their career choices after graduation from high school and that there were variations between the career choice and actual employment four years later.

The occupational stability of junior college students was the primary concern of Orlin Shires.²⁶ He disclosed that the majority of those selected chose an occupation before the seventh grade. Teaching was the major occupation chosen and less than 2 percent made a goal change between high school and junior college. Shire's discovery was fortified by Magruder,²⁷ who found stability in occupational choice by testing eighth graders and retesting them as twelfth graders. His conclusion was that those who are definite about a career, such as teaching, are more likely to achieve that goal than are those who are unsure of their choice.

Holland²⁸ examined the psychological meaning and predictive validity of a person's current and past

²⁶Orlin H. Shires, "Factors Influencing Choice of Occupational Goals for Selected Junior College Students," Dissertation Abstracts, 32:07-A, 1971.

²⁷Alan W. Magruder, "A Study of the Stability of Career Choices, School Plans and Interests of Students During the Secondary School Years, With Special Emphasis on the Factors Related With Instability," Dissertation Abstracts, 32:02-A, 1970.

²⁸John L. Holland and Gary D. Gottfredson, "Applying a Typology to Vocational Aspirations" (Baltimore, Maryland: Center for the Study of Social Organization of Schools, June 1974).

vocational aspirations. Using high school, college, and adult samples, he concluded that a person's vocational aspirations have psychological meaning, suggesting decision-making ability, psychological integration, and predictability. Vocational aspirations and successive jobs appear related. He summarized by saying:

The practical applications of the present and related studies are clear and unequivocal. There is no clear need for further replication. In vocational counseling and selection, interviewers can obtain vocational aspirations and score such responses immediately or along with other material after the interview. Comparison of the vocational aspiration codes with inventoried interests will allow interviewers to obtain better predictions than has heretofore been possible, at least for a subgroup of persons. When aspirations and inventory coincide, predictions can be made with more confidence. If they diverge, then the vocational aspiration is still a better predictor.²⁹

Summary

In review, Super's position that an individual's career pattern is determined by the parental socioeconomic level, mental ability, personality characteristics, and the opportunities to which one is exposed has gained wide acceptance. Notwithstanding Holland's findings that vocational aspirations are a predictor of vocational future, they are only an indication that the socioeconomic influence of the parents affects vocational aspirations. The research of Bendix, Sewell and Haller, Porter, Drabick,

²⁹Ibid., p. 15.

and Brook dealt with the relationship of parents' socioeconomic status and the future occupational choice of their children. All studies reported a positive relationship. The socioeconomic status of the parents seemingly does affect occupational choice. Although Slocum's study did not support parental socioeconomic status as a major contributing factor associated with occupational choice, it was not rejected entirely.

In spite of the fact that Lambert's investigation lent some support to Roe's theory that family climate--loving or cool--influenced the child to select person or non-person oriented occupations, the theory has to be suspect. Parental influence does not seem to be a factor. The studies of Kroger-Louttit and Berdie identified that the son's occupational choice was influenced by the father's occupation. Sostek revealed that the occupational choice of children is influenced by the parent with whom they most identify. Brunkan, using parental concentration, acceptance, and avoidance, found no effect on children. Roe and Siegelman's study attempted to associate parental love and affection with occupational choice. However, their findings did not support their theories.

Occupational aspirations are an indication of future roles. Shire's findings revealed that many individuals make occupational decisions during adolescence

and less than 2 percent of those making decisions change their minds from high school to junior college. Magruder reported occupational choice stability for students between the eighth and twelfth grades. Holland revealed that occupational aspirations are better predictors of occupational future than are interest inventories. O'Reilly concluded that secondary students are not mature enough to make an intelligent occupational choice.

This review indicates that there is general agreement among researchers regarding the positive relationships found between parental socioeconomic level, college attendance, and future occupational choice; those with higher socioeconomic levels attaining higher educational and occupational levels. Generally, researchers report mixed findings concerning parental influence and occupational choice. Although mixed findings are reported for (1) the stability of occupational choices made by high school students and (2) the reliability of using occupational aspirations as an indication of projected occupational attainment, the evidence tends to support both positions. This reviewer feels that career aspiration is a reasonable indication of one's occupational future.

CHAPTER III

METHODOLOGY

In this chapter the writer reviews the techniques used to collect and analyze data relating to the occupational aspirations of parents and students enrolled in DOD Schools in Japan and Korea. The topics are arranged in the approximate sequence in which the events occurred.

Research Approval

In the spring of 1974, permission to conduct this project was obtained from Dr. Edward Killin, Director of DOD Schools, Pacific Area. See Appendix A (p. 66). And in October, 1974, approval to conduct this project in District I (Japan and Korea) was granted by Dr. Robert Lundgren, the District Superintendent. The superintendent solicited the support of the twelve principals whose schools would be involved. See Appendix B (p. 69). And the writer contacted each principal to schedule the school for instrument administration. See Appendix C (p. 71).

Research Instrument

The instrument used to collect data for this paper is the Occupational Aspiration Scale (OAS) developed by Archibald Haller and Irwin Miller. Because the OAS is based on the landmark National Opinion Research Center (NORC) study of 1947, the results concerning spatio-temporal stability of occupational prestige are of particular significance.

The NORC research was replicated by Hodge, Siegel and Rossi¹ in 1963. Their findings indicate equilibrium of occupational prestige between the time of the original NORC survey and their replication. The product-moment correlation between these two prestige hierarchies is .99 and varies slightly from .96 to .99 within various subsets of occupations. Furthermore, Hodge, Treiman and Rossi² reveal that these same percentages are also true of urbanized areas of the world. Thus, occupational prestige hierarchy is stable both as to time and place.

¹Robert W. Hodge, Paul M. Siegel, and Peter H. Rossi, "Occupational Prestige in the United States: 1925-1963," in Class, Status, and Power, 2nd ed., edited by Reinhard Bendix and Seymour Martin Lipset (New York: The Free Press, 1966), pp. 322-34.

²Robert W. Hodge, Donald J. Treiman, and Peter H. Rossi, "A Comparative Study of Occupational Prestige," in Class, Status, and Power, 2nd ed., edited by Reinhard Bendix and Seymour Martin Lipset (New York: The Free Press, 1966), pp. 309-21.

Haller and Miller's³ research indicates that the reliability of OAS is about .80 and the standard error of measurement approximates 5.30. In addition, the coefficient of stability (.77) measured over ten-week intervals agrees with the coefficients of internal consistency (.75, .82, and .84).

These statistics are supported by Westbrook's⁴ evidence suggesting that OAS is a reliable measure of levels of occupational aspiration:

1. Test and retest reliability coefficients of .84 for males and .88 for females for two-week and .82 for males and .78 for females for five-week periods are satisfactory.
2. Hypotheses about the elevation of mean OAS item scores are partially supported.
3. Boys and girls do not differ significantly on OAS total scores; however, girls' scores show less variability.

This difference is because, at the extreme ends, the OAS is primarily for males, since the occupations at the ends have been traditionally selected by males; therefore

³A. O. Haller and I. W. Miller, The Occupational Aspiration Scale (Cambridge, Massachusetts: Schenkman Publishing Company, Inc., 1971), p. 78.

⁴B. W. Westbrook, "The Reliability and Validity of a New Measure of Level of Occupational Aspiration," Educational and Psychological Measurement 26 (1966): 1004.

females tend to choose occupations closer to the center of the occupational prestige hierarchy.

Pilot Project

In the spring of 1974, fifteen eighth and fifteen twelfth grade students were tested at Chofu Junior and Senior High School, a DOD School in Japan. The purpose of this tentative study was to determine the feasibility of the data-collection methodology and the suitability of the instrument design. The Chofu complex was selected as the prototype because the school would not be in session when the future investigations were to be conducted.

A letter explaining the reasons for this study together with a copy of the OAS was mailed to ten parents of students from each grade tested. See Appendix D (p. 74). Each parent was asked to respond to the questionnaire and return it in the self-addressed, stamped envelope provided.

Seventy percent of the parents selected replied as requested. And the results of this pilot project indicated that the data-collection methodology and instrument design were appropriate for assessing the occupational aspirations of eighth and twelfth grade students and their parents.

Population and Sample

During school year 1974-75, the secondary schools of District I had an eighth grade enrollment of 894, and a twelfth grade enrollment of 397. See Table 1 (p. 37).

An attempt was made to survey all eighth and twelfth grade students in District I. The responses totaled 853 eighth graders, and 369 twelfth graders. See Table 2 (p. 38). These responses represented 94 percent of the eighth and twelfth grade population. Sixty-nine students could not be tabulated because of (1) incomplete answers, (2) absenteeism, or (3) transient status.

Stratified random sampling, drawing numbered slips with replacement, was used to identify students whose parents were to be involved in the study on a school-by-school basis. Two hundred fifty-six parents of eighth and twelfth graders were selected for participation. See Table 1.

By April, 1975, the parents of 177 eighth graders and 79 twelfth graders were contacted. And from these, the parents of ninety eighth graders and thirty-eight twelfth graders responded. See Table 2. Two parent responses, one from each grade, could not be scored because of incomplete answers.

Table 1. Student enrollment and parent sample by school
for year 1974-75

School Involved	Eighth Grade Enrollment	Twelfth Grade Enrollment	Parents of Eighth Graders Selected	Parents of Seniors Selected
Misawa High School	96	39	19	8
Zama High School	137	67	27	13
Pusan American School	27	13	5	3
Seoul American School	179	81	35	16
Taegu American School	22	.. ^a	4	..
Ernest J. King	14	9	3	2
Mathew C. Perry High School	28	19	6	3
Sullivans Elementary School	61	..	12	..
Tachikawa Elementary School	65	..	13	..
Yokota High School	197	118	39	24
Nile C. Kinnick Middle School	68	..	14	..
Nile C. Kinnick High School	..	51	..	10
Total	894	397	177	79

^aNo enrollment.

Table 2. Summary of student and parent responses for year 1974-75

Schools Involved	Survey Date	Number of Replies				Total
		Eighth Grade Students	Twelfth Grade Students	Parents Eighth Graders	Parents Twelfth Graders	
Misawa High School	December 1974	84	33	7	4	128
Zama High School	January 1975	133	63	15	6	217
Pusan American School	February 1975	23	11	1	1	36
Seoul American School	February 1975	178	77	23	8	286
Taegu American School	February 1975	21	.. ^a	2	..	23
Ernest J. King	March 1975	13	7	1	0	21
Mathew C. Perry High School	March 1975	27	17	2	2	48
Sullivan's Elementary School	March 1975	54	..	8	..	62
Tachikawa Elementary School	March 1975	61	..	6	..	67
Yokota High School	March 1975	192	115	19	11	337
Nile C. Kinnick Middle School	April 1975	67	..	6	..	73
Nile C. Kinnick High School	April 1975	..	46	..	6	52
Total		853	369	90	38	1,350

^aNo enrollment.

Data Collection

In November, 1974, at a management council meeting of District I, the research project was presented to those school principals whose schools were included in the study. The purposes and procedures were explained and a commitment of support secured. Following this meeting, during the months of December and January, arrangements were made by letter and telephone for school visitation and instrument administration.

Data collection began in December, 1974 (see Table 2, p. 38), at Misawa High School located in northern Japan. With the assistance of teachers and counselors, the OAS was administered to all eighth and twelfth grade students during regular school hours. See Appendix E (p. 81). Additional sets of OAS and answer sheets were left with counselors for those students who were absent. This procedure was used to collect data from 95 percent of the eighth grade and 93 percent of the twelfth grade students enrolled in District I schools.

By April, 1975, 177 eighth grade parents and 79 twelfth grade parents, 20 percent of the eighth and twelfth grade parent population, were selected for study participation. See Table 1 (p. 37). And, as in the pilot project, each set of parents received a letter soliciting their cooperation, a copy of OAS, and a self-addressed stamped envelope. Fifty percent of the parents

of eighth and twelfth grade students contacted responded to the survey. Considering the mobility of Department of Defense families toward the end of the school year, no second mailing was attempted.

Statistical Procedures

The statistical procedures employed were those associated with a $2 \times 2 \times 2$ analysis of variance factorial design. In addition to the F values obtained from the analyses of variance, additional analyses of the significance of comparison group mean scores required by the hypotheses were ascertained by the two-tailed t test. And for all statistical analyses, the .05 level of confidence was required to not retain the null hypothesis at the recommendation of the statistical advisor.

CHAPTER IV

ANALYSIS OF THE DATA

Data on the Occupational Aspiration Scale were gathered from 126 parents, and 1,152 students enrolled in Department of Defense Dependents Schools in Japan and Korea. The 1,278 respondents were partitioned into the following eight groups, which comprised the 2 x 2 x 2 analysis of variance factorial design for the study:

<u>Main Effect A: Respondents</u>	<u>Main Effect B: Grade Levels</u>	<u>Main Effect C: Sex</u>	
		<u>Boys</u>	<u>Girls</u>
Students	Grade 8	404	391
	Grade 12	161	196
Parents	Grade 8	48	41
	Grade 12	18	19

The summary table for the analysis of variance on these data appears in Table 1 (p. 37). An analysis of the data in Table 3 (p. 42) shows that significant response differences on the Occupational Aspiration Scale existed for main effects A (students/parents) and C (boys and girls) beyond the .001 level of confidence. It should be noted that no statistically significant

Table 3. Analysis of variance summary table for main effect

Source	SS	DF	MS	F	p
A. Student/parent	8,326.13	1	8,326.13	67.13***	p>.0001
B. Grade level	384.25	1	384.25	3.10	p>.0787
C. Sex	4,267.27	1	4,267.27	34.40***	p>.0001
AB. Student/parent x grade level	144.63	1	144.63	1.17	p>.2804
AC. Student/parent x sex	66.00	1	66.00	.53	p>.4659
BC. Grade level x sex	30.58	1	30.58	.25	p>.6197
ABC. Student/parent x grade level x sex	16.21	1	16.21	.13	p>.7178
Within	157,505.40	$\frac{1,270}{1,277}$	124.02		

df = 1, 1,277; *p .05 = 3.84; **p .01 = 6.64; ***p .001 = 10.83.

differences existed for main effect B (grade levels), or for any of the four interaction combinations of the three main effects.

A comprehensive analysis of the data on a hypothesis-by-hypothesis basis follows:

Hypothesis I

There is no statistically significant difference in the scores on the Occupational Aspiration Scale made by student and parent respondents in terms of:

- a. Eighth grade boys and parents of eighth grade boys
- b. Eighth grade girls and parents of eighth grade girls
- c. Twelfth grade boys and parents of eighth grade boys
- d. Twelfth grade girls and parents of twelfth grade girls
- e. All boys and all parents of boys
- f. All girls and all parents of girls
- g. All students and all parents

As noted in Table 3 (p. 42), the main effect A (respondents), which is related to Hypothesis I, was statistically significant beyond the .001 level of confidence ($F = 67.13$). Parent mean scores in every instance were higher than student mean scores. Data on the seven subsections of Hypothesis I were analyzed by a t test. These data are shown in Table 4 (p. 44).

An analysis of the data in Table 4 reveals that the results of all seven t tests were statistically significant. In each comparison, the parental score on the Occupational Aspiration Scale was higher than the student score. With the exception of the comparison between

Table 4. t-test data for seven respondent comparison groups

Group	N	Mean	S.D.	t	p
8th grade boys	404	44.84	11.98	6.222***	.001
Parents of 8th grade boys	48	54.52	9.96		
8th grade girls	391	41.48	11.16	5.306***	.001
Parents of 8th grade girls	41	50.12	9.78		
12th grade boys	161	46.73	11.26	4.420***	.001
Parents of 12th grade boys	18	54.83	6.80		
12th grade girls	196	42.87	10.17	2.098*	.05
Parents of 12th grade girls	19	48.26	8.58		
All boys	565	45.38	11.92	7.377***	.001
All parents of boys	66	54.60	9.30		
All girls	587	41.94	10.85	5.897***	.001
All parents of girls	60	49.53	9.38		
All students	1,152	43.63	8.80	9.241***	.001
All parents	126	52.19	9.98		

*p .05 = 1.96; **p .01 = 2.58; ***p .001 = 3.29.

twelfth grade girls and their parents which was at the .05 level of confidence, the other six comparisons were statistically significant beyond the .001 level of confidence.

Decision: Do not retain the null hypothesis for Hypothesis I. Parent occupational aspiration exceeds student aspiration for all seven comparisons.

Hypothesis II

There is no statistically significant difference in the scores on the Occupational Aspiration Scale by grade level for students and parents of students in terms of:

- a. Eighth grade boys and twelfth grade boys
- b. Eighth grade girls and twelfth grade girls
- c. Parents of eighth grade boys and parents of twelfth grade boys
- d. Parents of eighth grade girls and parents of twelfth grade girls
- e. All eighth grade students and all twelfth grade students
- f. All parents of eighth grade students and all parents of twelfth grade students

Main effect B in Table 3 (p. 42), which was concerned with the differences in respondent scores by grade level, was not statistically significant ($F = 3.10$). Data on a t test analysis for the six comparisons contained in Hypothesis II are depicted in Table 5 (p. 46).

Consistent with the nonsignificant main effect B (grade level) found in Table 3, the six t ratios associated with the respective subset comparisons for Hypothesis II also reflect no significant differences in mean scores. The grade 8-12 comparison for boys approached the p value criterion for not retaining the null hypothesis. It is interesting to note that in the three student comparisons, the mean score for grade 12 students tended to be higher than the respective mean scores for grade 8 students. This tendency of ascending mean scores from grade 8 to grade 12 was also evident in one of the three parent comparisons; namely, for boys.

The parental aspiration mean scores for girls declined from grade 8 to grade 12, and for all parents also.

Table 5. t-test data for six grade level comparison groups

Group	N	Mean	S.D.	t	p
8th grade boys	404	44.84	11.98	1.767	.08
12th grade boys	161	46.73	11.27		
8th grade girls	391	41.48	11.16	1.511	.14
12th grade girls	196	42.87	10.17		
Parents of 8th grade boys	48	54.52	9.96	0.144	.81
Parents of 12th grade boys	18	54.83	6.80		
Parents of 8th grade girls	41	50.12	9.78	0.747	.46
Parents of 12th grade girls	19	48.26	8.58		
All 8th grade students	795	43.19	11.63	1.288	.20
All 12th grade students	357	44.61	10.84		
All parents of 8th grade students	89	52.49	10.07	0.592	.55
All parents of 12th grade students	37	51.46	8.35		

*p .05 = 1.96; **p .01 = 2.58; ***p .001 = 3.29.

Decision: The null hypothesis for Hypothesis II is retained.

Hypothesis III

There is no statistically significant difference in the scores on the Occupational Aspiration Scale made by students and parents by sex of students in terms of:

- a. Eighth grade boys and eighth grade girls
- b. Twelfth grade boys and twelfth grade girls
- c. Parents of eighth grade boys and parents of eighth grade girls
- d. Parents of twelfth grade boys and parents of twelfth grade girls
- e. All boys and all girls
- f. All parents of boys and all parents of girls

Main effect C (sex) in Table 3 (p. 42) was statistically significant beyond the .001 level of confidence ($F = 34.40$). Data for a t test analysis for the six comparison groups associated with Hypothesis III are contained in Table 6 (p. 48).

All of the six t test analyses in Table 6 were statistically significant by sex. All three student sex comparisons yielded significance beyond the .001 level of confidence, with boys achieving higher mean scores on the Occupational Aspiration Scale than girls. Similarly, the three comparisons involving parent scores on the Occupational Aspiration Scale were statistically significant, favoring parents of boys at the .05 level for parents of eighth grade students, and at the .01 level of confidence for parents of both grade 12 students and for the total parent scores.

Table 6. t-test data for six sex comparison groups

Group	N	Mean	S.D.	t	p
8th grade boys	404	44.84	11.98	4.093***	.001
8th grade girls	391	41.48	11.16		
12th grade boys	161	46.73	11.27	3.365***	.001
12th grade girls	196	42.87	10.17		
Parents of 8th grade boys	48	54.52	9.96	2.098*	.05
Parents of 8th grade girls	41	50.12	9.78		
Parents of 12th grade boys	18	54.83	6.80	2.588**	.01
Parents of 12th grade girls	19	48.26	8.58		
All boys	565	45.38	11.83	4.118***	.001
All girls	587	41.94	10.84		
All parents of boys	66	54.61	9.16	3.279**	.01
All parents of girls	60	49.53	9.89		

*p .05 = 1.96; **p .01 = 2.58; ***p .001 = 3.29

Decision: The null hypothesis for Hypothesis III is not retained at the .001 level of confidence for student respondents, and is not retained for parents of students at the .05 level for grade 8, and at the .01 level of confidence for grade 12 and total parent responses. In all six nonretentions of the null hypothesis, student and parental aspirations favored boys over girls.

Hypothesis IV

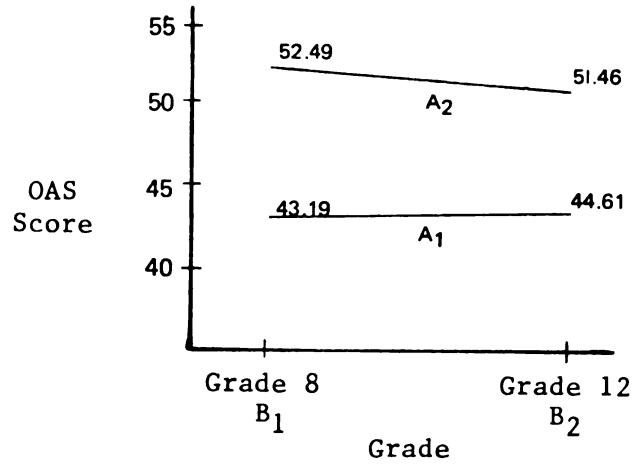
There is no statistically significant interaction effect on scores of parent and student respondents on the Occupational Aspiration Scale by sex of student, grade level, or any combination of these variables.

The four interactions operating in the $2 \times 2 \times 2$ analysis of variance factorial design for this study were not statistically significant. The AB interaction (students/parents \times grade level) F value of 1.17; the AC interaction (students/parents \times sex) F value of .53; the BC interaction (grade level \times sex) F value of .25; and the ABC interaction (students/parents \times grade level \times sex) F value of .13 were each less than the F value of 3.84 required for statistical significance at the .05 level of confidence.

Each of the four interactions with their respective mean values has been plotted in Figures 2-5 (pp. 50-52).

AB Interaction

The mean differences in scores of eighth and twelfth grade students are approximately the same for eighth and twelfth grade respondents as measured by OAS. Figure 2 (p. 50) illustrates that the difference between the means of A_1 and A_2 for the first level of B is not significantly different from the difference between the means of A_1 and A_2 for the second level of B.



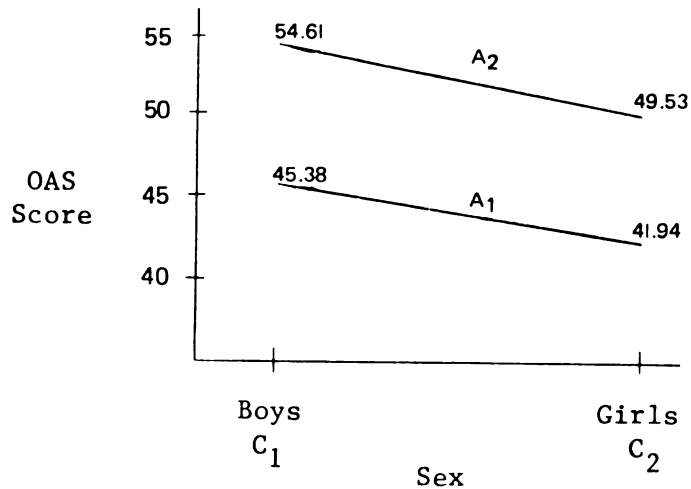
A₁ = Students

A₂ = Parents

B₁ = Grade 8

B₂ = Grade 12

Figure 2. Mean scores of students and parents for students at each grade level



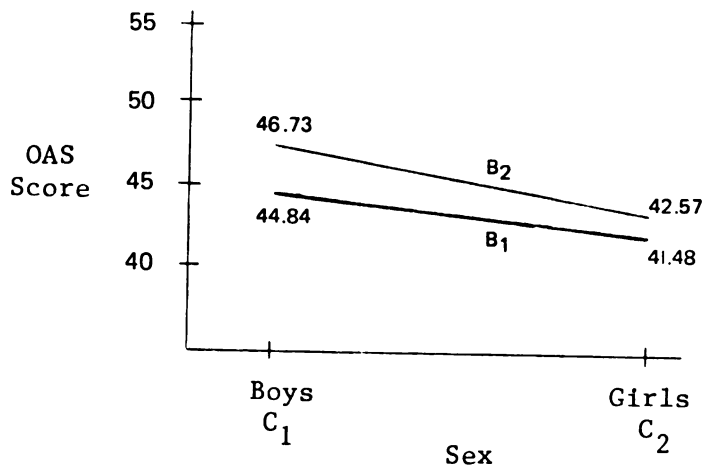
A₁ = Students

A₂ = Parents

C₁ = Boys

C₂ = Girls

Figure 3. Mean scores of students and parents for students by sex of students



B_1 = Grade 8

B_2 = Grade 12

C_1 = Boys

C_2 = Girls

Figure 4. Scores of eighth and twelfth grade students and parents for students by sex of students

AC Interaction

The mean differences in scores of eighth and twelfth grade students and parents of eighth and twelfth grade students are approximately the same for eighth and twelfth grade boys and girls and for the parents of eighth and twelfth grade boys and girls as measured by OAS. Figure 3 (p. 50) illustrates that the difference between the means of A_1 and A_2 for the first level of C is not significantly different from the difference between the means of A_1 and A_2 for the second level of C.

BC Interaction

The mean differences in scores of eighth and twelfth graders and the parents of eighth and twelfth

graders are approximately the same for eighth and twelfth grade boys and girls and the parents of eighth and twelfth grade boys and girls as measured by OAS. Figure 4 (p. 51) illustrates that the difference between the means of B_1 and B_2 for the first level of C is not significantly different from the difference between the means of B_1 and B_2 for the second level of C.

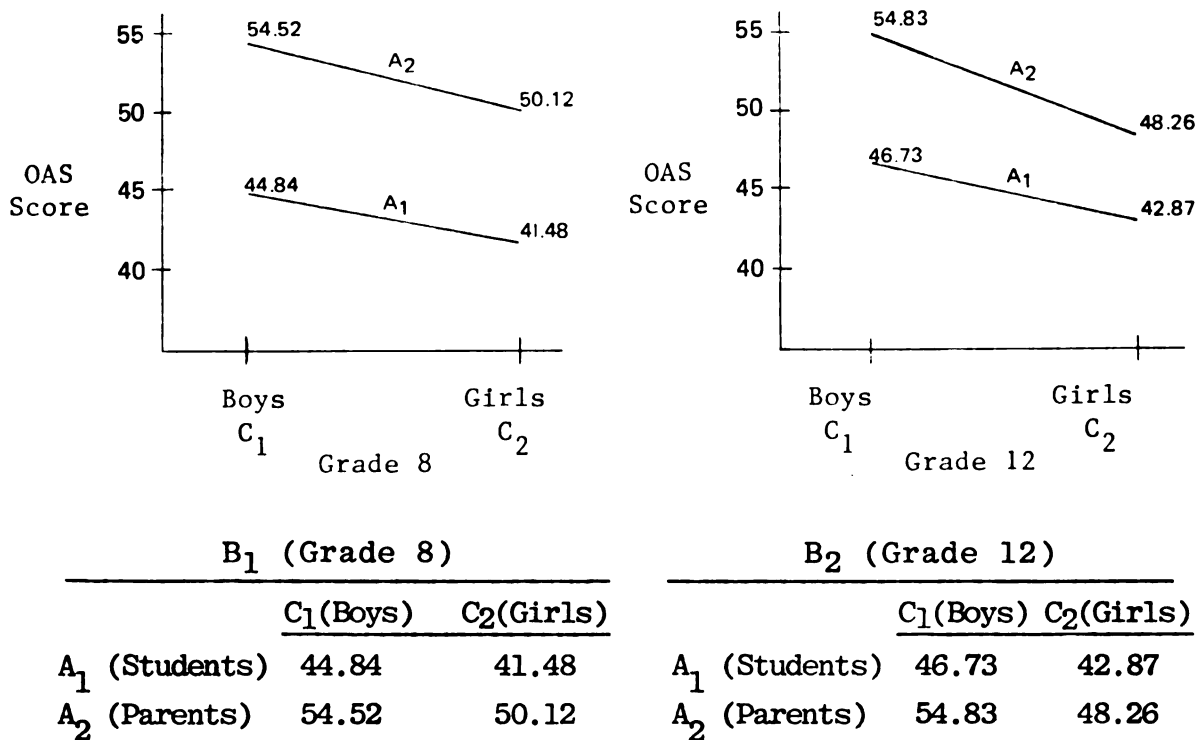


Figure 5. Analysis of variance table for main effect student and parent by grade by sex

ABC Interaction

The mean differences in scores of eighth and twelfth grade students and parents of eighth and twelfth grade students responses are approximately the same by sex for grade 8 and grade 12 respondents as measured by OAS. Figure 5 (p. 52) illustrates that there is no interaction between A and C at each level of B.

Decision: Hypothesis IV is not rejected in the null form.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The researcher's purpose in this study was to assist the DOD Schools in their attempt to resolve the problem of providing a meaningful educational program relative to the needs of their constituents by:

1. collecting and analyzing data pertinent to the occupational aspirations of and for students who are dependents of military and civilian personnel employed by the Department of Defense in Japan and Korea, and from these findings
2. providing recommendations for developing career exploratory and vocational education programs to serve their secondary students.

The primary problem was to determine if significant differences existed between (1) the level of occupational aspiration of eighth grade students and that which parents of eighth grade students have for them, and (2) the level of occupational aspiration of twelfth grade students and that which parents of twelfth grade

students have for them. The following questions were addressed:

1. Is the level of occupational aspiration the same for:
 - a. eighth and twelfth grade students?
 - b. students and parents?
 - c. boys and girls?
2. Is the level of occupational aspiration stable from eighth to twelfth grade?

Haller and Miller's¹ Occupational Aspiration Scale (OAS) was administered to all eighth and twelfth grade students enrolled in the Department of Defense Dependents Schools located in Japan and Korea. Throughout school year 1974-75, the OAS instrument was administered to the students during the regular school day. Twenty percent of the parents of eighth and twelfth grade students were sent OAS instruments. Seven hundred and ninety-five eighth grade student responses, 357 twelfth grade student responses, 89 eighth grade parent responses, and 37 twelfth grade parent responses were tabulated for inclusion in the study.

Main effects and interactions were examined through an analysis of variance, 2 x 2 x 2 factorial

¹Archibald O. Haller and Irwin W. Miller, The Occupational Aspiration Scale: Theory, Structure and Correlates (Cambridge, Massachusetts: Schendman Publishing Company, Inc., 1971).

design. To satisfy the requirements of specific hypotheses, the t ratio was computed. For each statistical test employed, the .05 confidence level was required to not retain the null hypothesis.

Four hypotheses were generated in null form. Each hypothesis is presented, followed by the findings (general and specific) pertinent to it and a discussion of those findings before the next hypothesis is presented.

Hypothesis I: There is no statistically significant difference in the scores on the Occupational Aspiration Scale made by student and parent respondents in terms of:

- a. Eighth grade boys and parents of eighth grade boys
- b. Eighth grade girls and parents of eighth grade girls
- c. Twelfth grade boys and parents of twelfth grade boys
- d. Twelfth grade girls and parents of twelfth grade girls
- e. All boys and all parents of boys
- f. All girls and all parents of girls
- g. All students and all parents

Findings:

A. General: The respondent main effect of the analysis of variance revealed that parents achieved higher Occupational Aspiration Scores than did students ($p < .001$).

B. Specific: With the exception of the comparison described in Hypothesis I-d, which was statistically significant at the .05 level of confidence, the other six group comparisons were statistically significant beyond the .001 level of confidence. In all seven group

comparisons, parental OAS scores were higher than student OAS scores.

Discussion: Hypothesis I findings suggest that a disparity exists between the occupational aspirations of parents and students, and, in all cases examined, the parents attained higher mean scores than the students. This disparity tends to suggest that eighth and twelfth grade students exercise a high degree of freedom when making career or occupational decisions. This interpretation is consistent with Ginzberg's² theory of occupational choice, which suggests that young people make tentative occupational decisions between the ages of eleven and seventeen. Also, these data tend to indicate that parents need assistance in trying to understand the perceptions of youngsters who are learning about and exploring occupations and/or careers in the ages between eleven and seventeen.

Decision: The null form of Hypothesis I is not retained in favor of the statement that parents of eighth and twelfth grade students make higher OAS scores than do eighth and twelfth grade students.

Hypothesis II: There is no statistically significant difference in the scores on the Occupational Aspiration Scale made by grade level for students and parents of students in terms of:

²Eli Ginzberg, "Toward a Theory of Occupational Choice," Personnel and Guidance Journal 30 (1952): 491-95.

- a. Eighth grade boys and twelfth grade boys
- b. Eighth grade girls and twelfth grade girls
- c. Parents of eighth grade boys and parents of twelfth grade boys
- d. Parents of eighth grade girls and parents of twelfth grade girls
- e. All eighth grade students and all twelfth grade students
- f. All parents of eighth grade students and all parents of twelfth grade students

Findings:

A. General: In the overall analysis of variance, main effect B dealt with OAS scores by grade level. The obtained F value for grade level was not statistically significant.

B. Specific: None of the six t tests performed on the comparison groups for Hypothesis II was statistically significant. For the student respondents, higher OAS scores were made by twelfth grade students. Parent respondents tended to have higher twelfth grade OAS scores for boys, but lower twelfth grade than eighth grade scores for girls, and for the total. These observations should be tentatively regarded since statistical significance was not attained for any analysis performed for Hypothesis II.

Discussion: Hypothesis II findings indicate that a similarity exists between the occupational aspiration of eighth grade students and parents and twelfth grade students and parents. Although this similarity was consistent among all combinations, it is interesting to

note that the mean score for twelfth grade students tended to be higher than the respective mean score for eighth grade students. Similar findings regarding occupational choice stability were reported by Shires³ and Magruder.⁴ Shires, using 231 college students, found that 67 occupational choices (from the 100 occupational goals listed by the American College Testing Program) were selected by the 231 students from grade 6 through grade 14. The least number of occupations was selected at grade level 6 (twenty-five); the maximum number was selected at grade 12 (forty-two). It was concluded that less than 2 percent of the students made goal changes between the twelfth and thirteenth grade levels. Magruder also found stability in occupational choice when he tested eighth graders and retested them as twelfth graders. Magruder concluded that there was a high degree of career stability and that those students who were stable in career choice had higher achievement scores than those students who were unstable in career choice.

Decision: The null form of Hypothesis II is retained.

³Orlin H. Shires, "Factors Influencing Choice of Occupational Goals for Selected Junior College Students," Dissertation Abstracts, 32:07-A, 1971.

⁴Alan W. Magruder, "A Study of the Stability of Career Choices, School Plans and Interests of Students During the Secondary School Years, With Special Emphasis on the Factors Related With Instability," Dissertation Abstracts, 32:02-A, 1970.

Hypothesis III: There is no statistically significant difference in the scores on the Occupational Aspiration Scale made by students and parents by sex of students in terms of:

- a. Eighth grade boys and eighth grade girls
- b. Twelfth grade boys and twelfth grade girls
- c. Parents of eighth grade boys and parents of eighth grade girls
- d. Parents of twelfth grade boys and parents of twelfth grade girls
- e. All boys and all girls
- f. All parents of boys and all parents of girls

Findings:

A. General: The main effect C for sex in the analysis of variance was statistically significant beyond the .001 level of confidence favoring boys and parents of boys ($F = 34.40$).

B. Specific: All six t tests of comparison groups by sex favored boys and parents of boys. The three student comparisons of mean OAS scores favored boys beyond the .001 level of confidence. Parents of eighth grade boys attained higher OAS mean scores than parents of eighth grade girls at the .05 level of confidence.

Discussion: Hypothesis III findings suggest that a disparity exists between the occupational aspirations of boys and parents of boys and girls and the parents of girls. These findings are consistent with Gornick's⁵ position, which suggests that many women fear success

⁵Vivian Gornick, "Why Women Fear Success," in The First Ms Reader, ed. Francine Klazebrun (New York: Ms Magazine Corp., 1973), p. 30.

because they feel excellence in women is clearly associated with loss of femininity, social rejection, personal or societal destruction, or some combination of the above. The recently enacted Title IX Federal Rules and Regulations prohibit discriminatory educational practices which fail to provide equal educational opportunities on the basis of a student's sex. Parents and professional staff members associated with the Department of Defense Dependents Schools in Japan and Korea need to work together to review both the educational materials and instructional methodology to assure that sex-stereotypical materials and practices are eliminated.

Decision: The null form of Hypothesis III is not retained, and the fact that boys and parents of boys attain significantly higher OAS mean scores than girls or parents of girls replaces the null form of Hypothesis III.

Hypothesis IV: There is no statistically significant interaction effect on scores of parent and student respondents on the Occupational Aspiration Scale by sex of student, grade level, or any combination of these variables.

Findings: All four interactions calculated by the analysis of variance had F values less than 3.84, which is required to not retain the null hypothesis at the .05 level of confidence.

Decision: The null form of Hypothesis IV is retained.

Conclusions

The data analyzed in this study tend to suggest the following conclusions:

1. The Occupational Aspiration Scale appears to be a reliable and valid instrument for assessing the career aspirations of eighth and twelfth grade students and those which parents have for their children. These data, however, do not give any information on specific career choices or cluster areas of careers upon which to base curriculum modifications. Nor do OAS data yield any information on the reality of the choices of students and parents (of District I DOD Schools, Pacific) given ability level, prior achievement, and interest of a particular student.

2. The occupational aspirations which parents have for eighth and twelfth graders do not affect the occupational aspirations which eighth and twelfth graders (of District I DOD Schools, Pacific) have for themselves from the eighth grade to the twelfth grade. This is borne out by the score on the OAS instrument.

3. There must be factors, possibly societal and cultural, operative upon boys and girls prior to the eighth grade which cause differences in OAS scores, boys scoring higher.

4. There appear to be no effective equalizing influences which affect students' and parents' OAS scores from the eighth grade to the twelfth grade.

5. The lack of interaction between OAS scores demonstrates that apparently equal amounts of parental encouragement/discouragement are placed upon boys and girls at the eighth grade and the twelfth grade levels.

Recommendations

It is recommended that:

1. A sound testing program--including measures of occupational aspiration, ability, achievement, and vocational interest--should accompany the career education program in the secondary schools in District I DOD Schools, Pacific.

2. An active counseling program be instituted to assist students in making career choices. Parents should be included as an essential component to decrease the disparity found in this study between parents' aspirations for their children and those which the children have for themselves. The OAS could be a valuable tool if both student and parent complete the scale, and if counselors have individual conferences with a student and his/her parents to discuss the results. At this conference, other data on the student's ability, achievement, and vocational interest could be incorporated to assist the student in making tentative career decisions.

3. Follow-up evaluation and monitoring be conducted once the recommendations included in (1) and (2) above are initiated.

4. District I DOD Schools, Pacific, undertake a study of existing curriculum to determine if it is sex-stereotyped and/or if it favors boys over girls.

5. District I DOD Schools, Pacific, should encourage students to aspire to the occupational goals most suited to their abilities, interests, and aspirations. This is especially true for girls since their occupational aspirations are less than those of boys.

6. The work-study program, heavily relied upon for providing vocational education opportunities, should be altered and expanded. It should be altered to meet the needs of those students requiring career exploration experiences.

7. The OAS continue to be used as an occupational education information-gathering device until a more current, reliable, and valid instrument becomes available.

APPENDICES

APPENDIX A

PERMISSION LETTER, PACIFIC AREA

APPENDIX A

PERMISSION LETTER, PACIFIC AREA

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS PACIFIC AIR FORCES
APO SAN FRANCISCO 96553

4 MAR 1974



REPLY TO
ATTN OF DPN

SUBJECT Research Project - Career Education (Your Ltr, 11 Feb 74)

TO DPNC (Mr. Riley)

1. Permission is granted for Mr. Thomas R. Riley, Career Education Coordinator, DPNC, to utilize the DOD Dependents Schools - Pacific Area to conduct the research as presented in the proposal submitted to DPN on 11 February 1974.

2. It is understood that this research is being done in connection with Mr. Riley's doctoral studies at Michigan State University.

A handwritten signature in dark ink, appearing to read "Ed Killin", is written over the typed name.

EDWARD C. KILLIN
Director of Dependents Schools
DCS/Personnel

DEPARTMENT OF THE AIR FORCE
DOD DEPENDENT SCHOOLS-PACIFIC AREA
AREA CURRICULUM CENTER DPNC
APO SAN FRANCISCO 96323



REPLY TO
ATTN OF:

DPNC

11 February 1974

SUBJECT: Research Project - Career Education

TO: DPN/Dr. Killin

1. Educational programs which provide alternatives to college bound curriculum are limited in the DOD Dependents Schools, Pacific. Although career education is a K-12 approach and integration into existing curriculum is basic in grades K-9, students in secondary schools should be provided as many alternatives as possible. The development of saleable skills is an important alternative to and can be correlated with college bound curriculum.
2. At the same time, alternative means for providing saleable skills type educational programs, vocational education, must be identified. The concept of developing vocational skill centers, as is being done in city and intermediate school districts in the States, does not seem practical and may not meet the needs of the students in our system.
3. The research project enclosed may provide some insight regarding the aspiration of parents and students in the DOD Dependents Schools towards future life roles. Using the projected future as a basis, we in DOD Schools, will be in a better position to justify the future program development for career education at the high school level.
4. I recommend that the enclosed research project be approved and that the Career Education Coordinator be granted permission to conduct it.

THOMAS R. RILEY
Career Education Coordinator

Atch:
Research Proposal

APPENDIX B

**PERMISSION LETTER, DISTRICT I/DPN I
JAPAN AND KOREA**

APPENDIX B

PERMISSION LETTER, DISTRICT I/DPN I
JAPAN AND KOREA

DEPARTMENT OF THE AIR FORCE
DOD DEPENDENTS SCHOOLS PACIFIC AREA
DISTRICT 1 OFFICE
APO SAN FRANCISCO 96323



COPIES TO
ACTN OFF

DPN-I

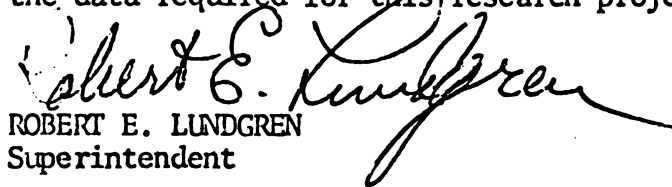
21 October 1974

SUBJECT:

Research Project

to DPN-I Principals

1. A research project, to be conducted by Thomas R. Riley, Career Education Coordinator-DPNC, entitled "An Examination of the Level of Occupational Aspirations of Students and Parents for Students in Department of Defense Dependents Schools, Pacific" has been approved by DPN to be conducted in DPN-I.
2. The purpose of this study is to assist the Department of Defense Dependents Schools, Pacific Area, in their attempt to resolve the problem of providing a meaningful vocational education program relevant to the needs of its recipients by (a) collecting data related to the aspirations of students and parents serving as military and civilian personnel overseas and, based upon analysis of this data, (b) providing recommendations for developing vocational education programs to serve the secondary students enrolled in Department of Defense Dependents Schools, Pacific Area.
3. The principal problem is to ascertain the difference in level of occupational aspiration of 8th and 12th grade boys, of 8th and 12th grade girls, and the level of occupational aspiration which parents have for their children in DPN-I.
4. Principals of all DPN-I schools with 8th and 12th grade students are asked to provide Mr. Riley with the assistance necessary to obtain the data required for this research project.


ROBERT E. LUNDGREN
Superintendent

APPENDIX C

LETTER TO PRINCIPALS

APPENDIX C

LETTER TO PRINCIPALS

DEPARTMENT OF THE AIR FORCE
DOD DEPENDENT SCHOOLS-PACIFIC AREA
AREA CURRICULUM CENTER DPNC
APO SAN FRANCISCO 96323



REPLY TO
ATTN OF: DPNC

14 January 1975

SUBJECT: Research Project

TO: DPN-I

1. Enclosed you will find copies of the letters seeking permission to conduct a research project related to the occupational aspirations of 8th and 12th grade students and the aspirations which 8th and 12th grade parents have for their children. Also included are letters from Dr. Killin Dr. Lundgren granting permission to conduct the research project.
2. The purpose of this research is to assist our schools with the problem of determining the demand or need for career exploratory and/or vocational education programs by (a) collecting data related to the occupational aspirations of students and parents serving as military and civilian personnel overseas and (b) based upon this data providing recommendations for developing vocational education programs to serve the secondary students enrolled in our schools.
3. In order to gather the data to complete this project, it will be necessary to survey every 8th and 12th grade student in District I and 20 percent of the 8th and 12th grade parents in District I.
4. I will be contacting your school, if I have not already done so, to make arrangements to administer the data collection instrument to your 8th and/or 12th grade students.
5. Along with this it will be necessary for me to secure the names and home addresses of 8th and 12th grade parents in order to mail questionnaires to them.
6. It is my hope that I will be able to have all data collected, students and parents, by the end of February and statistics completed by May.

7. If you would like to have copies of the research proposal which was submitted to DPN, please let me know.

A handwritten signature in dark ink, appearing to read 'Thomas R. Riley', is written over a horizontal line.

Thomas R. Riley
Career Education Coordinator

APPENDIX D

PARENT LETTER AND QUESTIONNAIRE

APPENDIX D

PARENT LETTER AND QUESTIONNAIRE

DEPARTMENT OF THE AIR FORCE
DOD DEPENDENT SCHOOLS-PACIFIC AREA
AREA CURRICULUM CENTER DPNC
APO SAN FRANCISCO 96323



REPLY TO
ATTN OF:

DPNC (Riley)

2 April 1975

SUBJECT: Research Project

TO:

Dear

You have been randomly selected to participate in a research project related to the future educational and occupational aspirations you have for your 8th grade student. This research project has been approved by the Director of Department of Defense Schools, Pacific.

The purpose of this research is to assist our schools with the problem of determining the demand or need for career exploratory and/or vocational education programs. In order to plan appropriately, it is necessary to have an indication of what students and parents feel the educational and occupational future of students will be. At the present time all of the 8th and 12th grade students in Japan and Korea DOD Schools have been surveyed using a similar questionnaire. Comparisons between the three groups will be conducted to help determine the educational needs of students in DOD Schools.

It will be most helpful if you would fill out the enclosed questionnaire, it should take no more than 10 minutes. Once it is completed, place the questionnaire in the enclosed envelope for return mail.

Your cooperation will be greatly appreciated.

Sincerely,

THOMAS R. RILEY
Career Education Coordinator

- 2 Atch
1. Questionnaire
2. Envelope

DEPARTMENT OF THE AIR FORCE
DOD DEPENDENT SCHOOLS-PACIFIC AREA
AREA CURRICULUM CENTER DPNC
APO SAN FRANCISCO 96323



REPLY TO
ATTN OF:

DPNC (Riley)

2 April 1975

Research Project

SUBJECT:

TO:

Dear

You have been randomly selected to participate in a research project related to the future educational and occupational aspirations you have for your 12th grade student. This research project has been approved by the Director of Department of Defense Schools, Pacific.

The purpose of this research is to assist our schools with the problem of determining the demand or need for career exploratory and/or vocational education programs. In order to plan appropriately, it is necessary to have an indication of what students and parents feel the educational and occupational future of students will be. At the present time all of the 8th and 12th grade students in Japan and Korea DOD Schools have been surveyed using a similar questionnaire. Comparisons between the three groups will be conducted to help determine the educational needs of students in DOD Schools.

It will be most helpful if you would fill out the enclosed questionnaire, it should take no more than 10 minutes. Once it is completed, place the questionnaire in the enclosed envelope for return mail.

Your cooperation will be greatly appreciated.

Sincerely,

THOMAS R. RILEY
Career Education Coordinator

- 2 atch
1. Questionnaire
2. Envelope

DOD DEPENDENTS SCHOOLS STUDY

Conducted by DPNC

Occupational Aspiration Scale
 (Copyright by Archie O. Haller)
 Parent Survey

Circle Grade and Sex of Your Son/Daughter:

Survey Code _____

8 12 M F

Sponsors Branch of Service:

Do you feel your Son/Daughter
will attend a:

Air Force	1	4 Year College
Army	2	2 Year College
Civilian	3	Trade Technical School
Coast Guard	4	None of the above
Marine Corps	5	
Navy	6	

This set of questions concerns your interest in the occupational future of your son/daughter. Each one asks you to choose one job out of ten which you would like to see him/her obtain or aspire to at (1) the end of his/her formal education or (2) age 30.

Be sure the grade and sex of your son/daughter, sponsors branch of service, and future educational plans which you desire for your son or daughter are appropriately marked on top of this page.

Read each question carefully. They are all different.

Answer each one the best you can. Don't omit or change any.

Question 1. Of the jobs listed in this question, which is the best one you are really sure your son or daughter can get when his/her schooling is over?

- A. _____ Lawyer
- B. _____ Welfare worker for a city government
- C. _____ United States representative in Congress
- D. _____ Restaurant cook
- E. _____ United States Supreme Court Justice
- F. _____ Night watch person
- G. _____ Sociologist
- H. _____ Policeman/woman
- I. _____ County agricultural agent
- J. _____ Filling station attendant

Question 2. Of the jobs listed in this question, which one would you choose if you were free to choose any of them you wished for your son/daughter when his/her schooling is over.

- A. ☐ Member of the board of directors of a large corporation
- B. ☐ Undertaker
- C. ☐ Banker
- D. ☐ Machine operator in a factory
- E. ☐ Physician (doctor)
- F. ☐ Clothes presser in a laundry
- G. ☐ Accountant for a large business
- H. ☐ Railroad conductor
- I. ☐ Railroad engineer
- J. ☐ Singer in a night club

Question 3. Of the jobs listed in this question which is the best one you are really sure your son/daughter can get when his/her schooling is over.

- A. ☐ Nuclear Physicist
- B. ☐ Reporter for a daily newspaper
- C. ☐ County judge
- D. ☐ Barber/Cosmetologist
- E. ☐ State governor
- F. ☐ Soda fountain clerk
- G. ☐ Biologist
- H. ☐ Mail Carrier
- I. ☐ Official of an international labor union
- J. ☐ Farm hand

Question 4. Of the jobs listed in this question, which one would you choose if you were free to choose any of them you wished for your son/daughter when his/her schooling is over.

- A. ☐ Psychologist
- B. ☐ Manager of a small store in a city
- C. ☐ Head of a department in state government
- D. ☐ Clerk in a store
- E. ☐ Cabinet member in the federal government
- F. ☐ Janitor
- G. ☐ Musician in a symphony orchestra
- H. ☐ Carpenter
- I. ☐ Radio announcer
- J. ☐ Coal miner

Question 5. Of the jobs listed in this question, which is the best one you are really sure your son/daughter can have by time he/she is 30 years old?

- A. ☐ Civil engineer
- B. ☐ Bookkeeper
- C. ☐ Minister or Priest
- D. ☐ Streetcar operator or city bus driver
- E. ☐ Diplomat in the United States Foreign Service
- F. ☐ Share cropper (one who owns no livestock or farm machinery, and does not manage the farm)
- G. ☐ Author of novels
- H. ☐ Plumber
- I. ☐ Newspaper columnist
- J. ☐ Taxi driver

Question 6. Of the jobs listed in this question, which one would you choose to have for your son/daughter when he/she is 30 years old, if you were free to choose any of them you wished?

- A. ☐ Airline pilot
- B. ☐ Insurance agent
- C. ☐ Architect
- D. ☐ Milk route person
- E. ☐ Mayor of a large city
- F. ☐ Garbage collector
- G. ☐ Captain in the Army
- H. ☐ Garage mechanic
- I. ☐ Owner-operator of a printing shop
- J. ☐ Railroad section hand

Question 7. Of the jobs listed in this question, which is the best one you are really sure your son/daughter can have by the time he/she is 30 years old?

- A. ☐ Artist who paints pictures that are exhibited in galleries
- B. ☐ Traveling sales person (wholesale concern)
- C. ☐ Chemist
- D. ☐ Truck driver
- E. ☐ College professor
- F. ☐ Street sweeper
- G. ☐ Building contractor
- H. ☐ Local official of a labor union
- I. ☐ Electrician
- J. ☐ Restaurant waiter/waitress

Question 8. Of the jobs listed in this question, which one would you choose to have for your son/daughter when he/she is 30 years old, if you were free to choose any of them you could?

- A. ☐ Owner of a factory that employs about 100 people
- B. ☐ Playground director
- C. ☐ Dentist
- D. ☐ Lumberjack
- E. ☐ Scientist
- F. ☐ Shoeshiner
- G. ☐ Public school teacher
- H. ☐ Owner-operator of a lunch stand
- I. ☐ Trained machinist
- J. ☐ Dock worker

APPENDIX E

STUDENT QUESTIONNAIRE AND ANSWER SHEET

APPENDIX E

STUDENT QUESTIONNAIRE AND ANSWER SHEET

DOD DEPENDENTS SCHOOLS STUDY

Conducted by DPNC

Occupational Aspiration Scale
(Copyright by Archie O. Haller)
Student Survey

Name:	2. Grade:	8th	12th
_____		A	B
School:	3. Sex:	M	F
_____		A	B
1. Sponsors Branch of Service:	4. Future Educational Plans:		
Air Force A	4 Year College		A
Army B	2 Year College		B
Civilian C	Trade & Technical School		C
Coast Guard D	None		D
Marine Corps E			
Navy F			

This set of 8 questions concerns your attitude towards different kinds of jobs.

Write on the answer sheet only.

Be sure your name, school, sponsors branch of service, grade, sex and future educational plans are on the top of the page.

Read each question carefully. They are all different.

Answer each one the best you can. Don't omit any.

Question 5. Of the jobs listed in this question, which is the best one you are really sure you can get when your schooling is over?

- A. ☐ Lawyer
- B. ☐ Welfare worker for a city government
- C. ☐ United States representative in Congress
- D. ☐ Restaurant cook
- E. ☐ United States Supreme Court Justice
- F. ☐ Night watch person
- G. ☐ Sociologist
- H. ☐ Policeman/woman
- I. ☐ County agricultural agent
- J. ☐ Filling station attendant

Question 6. Of the jobs listed in this question, which one would you choose if you were free to choose any of them you wished when your schooling is over?

- A. ☐ Member of the board of directors of a large corporation
- B. ☐ Undertaker
- C. ☐ Banker
- D. ☐ Machine operator in a factory
- E. ☐ Physician (doctor)
- F. ☐ Clothes presser in a laundry
- G. ☐ Accountant for a large business
- H. ☐ Railroad conductor
- I. ☐ Railroad engineer
- J. ☐ Singer in a night club

Question 7. Of the jobs listed in this question which is the best one you are really sure you can get when your schooling is over?

- A. ☐ Nuclear Physicist
- B. ☐ Reporter for a daily newspaper
- C. ☐ County judge
- D. ☐ Barber/Cosmetologist
- E. ☐ State governor
- F. ☐ Soda fountain clerk
- G. ☐ Biologist
- H. ☐ Mail carrier
- I. ☐ Official of an international labor union
- J. ☐ Farm hand

Question 8. Of the jobs listed in this question, which one would you choose if you were free to choose any of them you wished when your schooling is over?

- A. ☐ Psychologist
- B. ☐ Manager of a small store in a city
- C. ☐ Head of a department in state government
- D. ☐ Clerk in a store
- E. ☐ Cabinet member in the federal government
- F. ☐ Janitor
- G. ☐ Musician in a symphony orchestra
- H. ☐ Carpenter
- I. ☐ Radio announcer
- J. ☐ Coal miner

Question 9. Of the jobs listed in this question, which is the best one you are really sure you can have by the time you are 30 years old?

- A. ☐ Civil engineer
- B. ☐ Bookkeeper
- C. ☐ Minister or Priest
- D. ☐ Streetcar operator or city bus driver
- E. ☐ Diplomat in the United States Foreign Service
- F. ☐ Share cropper (one who owns no livestock or farm machinery, and does not manage the farm)
- G. ☐ Author of novels
- H. ☐ Plumber
- I. ☐ Newspaper columnist
- J. ☐ Taxi driver

Question 10. Of the jobs listed in this question, which one would you choose to have when you are 30 years old, if you were free to have any of them you wished?

- A. ☐ Airline pilot
- B. ☐ Insurance agent
- C. ☐ Architect
- D. ☐ Milk route person
- E. ☐ Mayor of a large city
- F. ☐ Garbage collector
- G. ☐ Captain in the Army
- H. ☐ Garage mechanic
- I. ☐ Owner-operator of a printing shop
- J. ☐ Railroad section hand

Question 11. Of the jobs listed in this question, which is the best one you are really sure you can have by the time you are 30 years old?

- A. ☐ Artist who paints pictures that are exhibited in galleries
- B. ☐ Traveling sales person (wholesale concern)
- C. ☐ Chemist
- D. ☐ Truck driver
- E. ☐ College professor
- F. ☐ Street sweeper
- G. ☐ Building contractor
- H. ☐ Local official of a labor union
- I. ☐ Electrician
- J. ☐ Restaurant waiter/waitress

Question 12. Of the jobs listed in this question, which one would you choose to have when you are 30 years old, if you were free to have any of them you wished?

- A. ☐ Owner of a factory that employs about 100 people
- B. ☐ Playground director
- C. ☐ Dentist
- D. ☐ Lumberjack
- E. ☐ Scientist
- F. ☐ Shoeshiner
- G. ☐ Public school teacher
- H. ☐ Owner-operator of a lunch stand
- I. ☐ Trained machinist
- J. ☐ Dock worker

School: _____

Question 1	A	B	C	D	E	F						
Branch of Service	A	B	C									
Question 2												
Grade Level												
Question 3	A	B										
Sex												
Question 4	A	B	C	D								
Future Educational Plans												
Question 5	A	B	C	D	E	F	G	H	I	J		
Question 6	A	B	C	D	E	F	G	H	I	J		
Question 7	A	B	C	D	E	F	G	H	I	J		
Question 8	A	B	C	D	E	F	G	H	I	J		
Question 9	A	B	C	D	E	F	G	H	I	J		
Question 10	A	B	C	D	E	F	G	H	I	J		
Question 11	A	B	C	D	E	F	G	H	I	J		
Question 12	A	B	C	D	E	F	G	H	I	J		

SELECTED BIBLIOGRAPHY

SELECTED BIBLIOGRAPHY

Books

- Borg, Walter R. Educational Research: An Introduction. New York: David McKay Co., 1970.
- Duncan, Otis D. Occupations and Social Status. New York: Free Press of Glencoe, Inc., 1961.
- Ginzberg, Eli. Occupational Choice. New York: Columbia University Press, 1951.
- Goldhammer, Keith, and Taylor, Robert E. Career Education: Perspective and Promise. Columbus, Ohio: Charles E. Merrill Publishing Co., 1972.
- Gornick, Vivian. "Why Women Fear Success." In The First Ms Reader, pp. 16-37. Edited by Francine Klazebrun. New York: Ms Magazine Corp., 1973.
- Haller, Archibald O., and Miller, William. The Occupational Aspiration Scale. Cambridge, Massachusetts: Schenkman Publishing Co., 1971.
- Havelock, Ronald G. The Change Agent's Guide to Innovation in Education. New Jersey: Educational Technology Publications, 1973.
- Holland, John L. The Psychology of Vocational Choice: A Theory of Personality Types and Environment. Massachusetts: Blaisdell Publishing Co., 1966.
- Hoyt, Kenneth B.; Evans, Rupert N.; Mackin, Edward R.; and Mangum, Garth L. Career Education: What It Is and How to Do It. Utah: Olympus Publishing Co., 1972.
- Janowitz, Morris. The Professional Soldier. New York: The Free Press, 1960.
- Merton, Robert K. Social Theory and Social Structure. New York: The Free Press, 1968.

- Miller, Carroll H. Foundations of Guidance. New York: Harper and Brothers, 1961.
- Osipow, Samuel H. Theories of Career Development. New York: Meredith Corporation, 1968.
- Reiss, Albert J., Jr. Occupations and Social Status. New York: The Free Press, 1965.
- Slonim, Morris. Sampling. New York: Simon and Schuster, 1960.
- Tennyson, W. Wesley. "Career Exploration." In Career Education, pp. 110-13. Edited by J. H. Magisos. Washington, D.C.: The American Vocational Association, Inc., 1973.
- Thelen, Herbert A. Education and the Human Quest. New York: Harper and Brothers Publishers, 1960.
- Vaness, T. School Leavers: Their Aspirations and Expectations. London: Methuen and Co., Ltd., 1962.

Periodicals

- Aberle, David F., and Maegele, K. D. "Middle-Class Fathers' Occupational and Role Attitudes Toward Children." Journal of Orthopsychiatry 22 (April 1952): 366-78.
- Bell, Gerald D. "Processes in the Formation of Adolescents' Aspirations." Social Forces 42 (December 1963): 179-85.
- Bendix, Reingard; Lipset, Seymour M.; and Malm, T. T. "Social Origin and Occupational Career Patterns." Industrial and Labor Relations Review 7 (January 1954): 246-61.
- Berdie, Ralph F. "Factors Associated With Vocational Interest." Journal of Educational Psychology 34 (May 1943): 257-77.
- Bowerman, Charles E., and Elder, Glen H. "Variations in Adolescent Perceptions of Family Power Structure." American Sociological Review 29 (August 1964): 551-67.

- Boyle, Richard R. "The Effect of the High School on Students' Aspirations." American Journal of Sociology 71 (May 1966): 628-39.
- Brook, Judith S. et al. "Aspiration Levels of and for Children: Age, Sex, Race, and Socioeconomic Correlates." Journal of Genetic Psychology 124 (March 1974): 11-16.
- Brunkan, Richard J. "Perceived Parental Attitudes and Parental Identification in Relation to Field of Vocational Choice." Journal of Counseling Psychology 12 (Spring 1965): 39-47.
- Caro, Francis C., and Philbald, Terence C. "Aspiration and Expectations: A Re-examination of the Bases for Social Class Differences in the Occupational Orientation of Male High School Students." Sociology and Social Research 49 (July 1965).
- Cohen, Elizabeth F. "Parental Factors in Educational Mobility." Sociology of Education 33 (Fall 1965): 404-25.
- Cutright, Phillip. "Students' Decision to Attend College." Journal of Educational Sociology 33 (February 1960): 292-99.
- Downie, N. M. "A Comparison Between Children Who Move From School to School With Those Who Have Been in Continuous Residence on Various Factors of Adjustment." Journal of Educational Psychology 44 (January 1953): 50-53.
- Elder, Glen H., Jr. "Family Structure and Educational Attainment: A Cross-National Analysis." American Sociological Review 30 (February 1965): 81-96.
- Ellis, Robert A., and Lane, W. Clayton. "Social Mobility and Social Isolation: A Test of Sorokin's Dissociative Hypothesis." American Sociological Review 32 (April 1967): 237-56.
- Empey, LaMar R. "Social Class and Occupational Aspiration: A Comparison of Absolute and Relative Measurement." American Sociological Review 21 (December 1956): 703-709.
- Evans, John W., Jr. "The Effect of Pupil Mobility Upon Academic Achievement." The National Elementary Principal 45 (April 1966): 18-22.

- Ginzberg, Eli. "Toward a Theory of Occupational Choice." Personnel and Guidance Journal 30 (1952): 490-94.
- Haller, Archibald O., and Butterworth, C. E. "Peer Influences on Levels of Occupational and Educational Aspiration." Social Forces 38 (May 1960): 289-95.
- Havighurst, Robert J. "Education, Social Mobility and Social Change in Four Societies: A Comparative Study." International Review of Education 4 (1958): 167-83.
- Kahl, Joseph A. "Educational and Occupational Aspirations of Common Man Boys." Harvard Educational Review (Summer 1953).
- Kroger, Robert, and Louttit, C. M. "The Influence of Fathers' Occupation on the Vocational Choices of High School Boys." The Journal of Applied Psychology 19 (April 1935): 203-12.
- Lipset, Seymour M.; Bendix, Reingard; and Malm, F. Theodore. "Job Plans and Entry Into the Labor Market." Social Forces 33 (March 1955): 224-32.
- Porter, Richard J. "Predicting Vocational Plans of High School Senior Boys." The Personnel and Guidance Journal 33 (December 1954): 215-18.
- Roe, Ann. "Early Determinants of Vocational Choice." Journal of Counseling Psychology 4 (Fall 1957): 212-17.
- _____, and Siegelman, Marian. "The Origin of Interests." American Personnel Guidance Association, Inquiry Studies 1 (1964).
- Rosen, Bernard C. "The Achievement Syndrome: A Psychocultural Dimension of Social Stratification." American Sociological Review 21 (April 1956): 203-11.
- Sewell, William H.; Haller, A. O.; and Straus, M. A. "Social Status and Educational and Occupational Aspiration." American Sociological Review 22 (February 1957): 67-73.

- Simpson, Richard, and Simpson, Ida H. "Values, Personal Influence and Occupational Choice." Social Forces 39 (December 1960): 116-25.
- Slocum, W. L. "Occupational Decision-Making by High School and College Girls." Family Life Coordinator 5 (December 1956): 46-53.
- Smelser, William T. "Adolescent and Adult Occupational Choice as a Function of Family Socioeconomic History." Sociometry 26 (December 1963): 393-409.
- Super, Donald E. "A Theory of Vocational Development." American Psychologist 8 (1953): 187-91.
- Westbrook, Bert W. "The Reliability and Validity of a New Measure of Level of Occupational Aspiration." Educational and Psychological Measurement 26 (1966): 997-1005.
- Youmans, Grant E. "Occupational Expectations of the 12th Grade Michigan Boys." Journal of Experimental Education 24 (June 1956).

Unpublished Materials

- Copes, Marvin L. "The Predictability of Career Choices of High School Seniors." Ph.D. dissertation, Purdue University, 1975.
- Department of Defense Dependents Schools, Pacific. Career Education Handbook, K-12. DOD Schools, Pacific/DPNC, APO S.F. 96323, July 1972.
- _____. Career Education, An Integrated Approach. Area Curriculum Center/DPNC, APO S.F. 96323, July 1972.
- Drabick, Lawrence W. "Factors Associated With Expectations: North Dakota High School Seniors." Educational Research No. 1. Grand Forks, North Dakota: North Dakota University, Center for Teaching and Learning, July 1974.
- Durig, Kurt R. "A Study of Social Status and Occupational Choice Among High School Students." Ph.D. dissertation, Indiana University, 1967.

- Esslinger, Carl W. "Educational and Occupational Aspirations and Expectations and the Educational, Personal, and Family Characteristics of Selected Twelfth Grade Female Students." Ph.D. dissertation, University of Illinois at Urbana-Champaign, 1976.
- Evans, Marilyn K. "The Influence of Vocational Information on the Occupational Aspiration of Students Classified by Levels of Ability, Need, Achievement, and Extraversion." Ph.D. dissertation, Indiana University, 1973.
- Ganann, Jan W. "Educational and Occupational Aspirations and Expectations of Post-Secondary Vocational-Technical School Students in Mississippi." Ph.D. dissertation, The University of Mississippi, 1976.
- Gleason, Patrick T. "Social Adjustment Patterns and Manifestations of Worldmindedness of Overseas-Experienced American Youth." Ph.D. dissertation, Michigan State University, 1969.
- Hanchey, Karlos W. "Factors Influencing Occupational Choices and Educational Plans of High School Students With Implications for Changes in the Role of the Secondary School." Ph.D. dissertation, Louisiana State University and Agricultural and Mechanical College, 1969.
- Holland, John L., and Gottfredson, Gary D. "Applying a Typology to Vocational Aspirations." Baltimore, Md.: Center for the Study of Social Organization of Schools, Johns Hopkins University, June 1974.
- Johnson, Charles W. "Relationship of Selected Characteristics of Ninth Grade Students to Their Professed or Manifest Occupational Choices." Ph.D. dissertation, University of Nebraska, 1963.
- Lambert, Geraldine B. "A Revision of the Parent-Child Relations Questionnaire to Investigate Roe's Occupational Choice Theory With Adolescent Girls." Ph.D. dissertation, University of Oklahoma, 1966.
- Magruder, Alan W. "A Study of the Stability of Career Choices, School Plans and Interests of Students During the Secondary School Years, With Special Emphasis on the Factors Related With Instability." Ph.D. dissertation, St. Louis University, 1970.

- Mannino, Ernest. "The Overseas Education of American Elementary and Secondary Pupils With Application for American Sponsored Schools Overseas: A Diagnosis and Plan for Action." Ph.D. dissertation, Michigan State University, 1970.
- Miller, Irwin, Jr. "Level of Occupational Aspiration: Problems in Its Conceptualization and Measurement." Master's thesis, Michigan State University, 1960.
- O'Reilly, Patrick A. "Predicting the Stability of Expressed Occupational Choices of Secondary Students." Ph.D. dissertation, Pennsylvania State University, 1973.
- Plata, Maximino. "A Comparative Study of the Occupational Aspirations and Interest of High School Age Emotionally Disturbed, Vocational-Technical and Regular Academic Students." Ph.D. dissertation, University of Kansas, 1971.
- Reinhart, Bruce. "Career Education and the Comprehensive Career-Education Model." Paper presented at the Annual Convention of the American Vocational Association, Portland, Oregon, 1971.
- Rice, John R. "Changes in the Levels of Educational and Occupational Aspirations Between the Tenth and Twelfth Grades of Capable High School Students in North Florida." Ph.D. dissertation, Florida State University, 1962.
- Shires, Orlin H. "Factors Influencing Choice of Occupational Goals for Selected Junior College Students." Ph.D. dissertation, University of California, 1971.
- Sostek, Alan B. "The Relation of Identification and Parent-Child Climate to Occupational Choice." Ph.D. dissertation, Boston University Graduate School, 1963.
- Strahl, Gladys T. "The Relationship of Centrality of Occupational Choice to Sex, Parental Identification, and Socioeconomic Level in University Undergraduate Students." Ph.D. dissertation, Michigan State University, 1967.

- Thomas, Ellis. "An Analysis of State Supervision and Leadership of Business and Office Education With Implications for and Recommendations to the State of New Jersey." Ph.D. dissertation, Michigan State University, 1971.
- U.S. Congress. House. "Education of Dependents Overseas by the Department of Defense and Independent American Schools." A Report by the Investigating Committee of the General Subcommittee on Labor. June 1970.
- _____. "Department of Defense Education of Dependents Overseas." A Report by the Investigating Committee of the Select Subcommittee on Education. Committee on Education and Labor, March 1966.
- Venegas, Moises T. "Educational and Occupational Aspirations and Expectations of El Paso High School Students." Ph.D. dissertation, New Mexico State University, 1973.
- Warren, Rachelle C. "Parents Structure, Children's Roles, and Occupational Choice: Variations on a Theme of Role Congruence." Ph.D. dissertation, University of Michigan, 1971.