

ENVIRONMENTAL EXPERIENCE AS RELATED TO
OCCUPATIONAL ASPIRATIONS, RACE, SEX
AND SOCIO-ECONOMIC STATUS

By

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CHAPTER I

INTRODUCTION

Guidance counselors and others with counseling responsibilities have long been faced with the problem of identifying information which could be used in counseling sessions. The problem is made more complex by the fact that more and more information concerning students is becoming available. Instead of simplifying the counselor's job, this explosion of information has often made the decision-making process more difficult. For example, counselors have so many types of information they may have difficulty relating one type of information to another in making effective use of both.

Because of the recently renewed national interest in career development topics, the continued emphases on providing aid to those with special needs and ethnic differences and from different socio-economic status classes, counselors are very much in the spotlight. They have been charged with helping students with varying aspirations, needs and abilities choose career directions which will provide them with the opportunity to become happy, contributing members of society.

One overriding problem has been to determine what a student's aspirations, needs and abilities are to help him make career decisions based on this determination. If good decisions are made, students would choose occupations which would make maximum use of his or her aspirations, needs and abilities.

Although aspirations, needs and abilities are very important, this study is directed primarily at the first crucial area--determining the occupational aspirations of students from different socio-economic levels who differ in terms of the kinds of experiences they have had due to limitations of environment, family ethnic origin, financial base, parent aspirations for children and other factors. According to Ewens et al. (1976) these differences in experiences relate to the development of students' interests, competencies, positive self-concept, attitudes, values and philosophy of life toward career development.

The Behaviorist Theory of career development model presented by Ewens et al. (1976) makes the following postulates about a person's experience:

- (1) When a person's environment (the perceptual field) offers more than one activity option, the person is more likely to select the activity of greatest interest, the one that offers the greatest possibility of success and most likely to satisfy perceived needs. The person will avoid if possible, those activities which are perceived as probable failure or unpleasant experiences.

- (2) The person's environment, which for some is quite limited, provides the opportunities for

experiences and, therefore, becomes a strong factor in the development of interests and competencies.

(3) The more unique an experience is to an individual the greater the immediate impact the experience is likely to have on the modification of self-concepts.

(4) As an individual progresses through life, perceptions of self change as a result of experiences, the development of new interests, the re-assessment of long-standing interests, awareness of previously unperceived abilities, and change of needs. This may cause a reevaluation of prior career decisions and lead to new career decisions.

(5) The evaluation of experiences from infancy to death provides the basis for the development of self concepts, attitudes, values, personality traits, and abilities, some of which may be influenced by factors of heredity (p. 17).

This theory focuses emphasis on the results of the experiences that the person has with people, things and events in his/her environment as determining the total career development process.

Drawing from the above postulates, conclusions can be made relative to the importance of experiences and the significant implications of these experiences for counselors working with students with varying aspirations to help them choose an occupation.

Statement of Problem

This investigation will examine how occupational choice relates to the highest manifest interest area and area of highest perceived abilities of seniors who are ethnically different and come from middle and lower socio-economic

status levels. An underlying assumption is that occupational choice is not contingent on individuals' social class position.

A second goal of this study is to examine the relationship between perceived ability and measure of manifest interest of seniors from middle and lower socio-economic status.

Hypotheses

(1) There will be no significant difference in the relationship between manifest interests and perceived abilities of middle and lower socio-economic students; between black and white ethnic students; between male and female students of the study group.

(2) There will be no significant difference in the amount of experience for students in the lower and upper socio-economic levels as indicated by their response to the manifest interest items for the black and white ethnic groups and for the male and female groups.

(3) There will be no significant difference in the level of job choices for students from lower and upper socio-economic levels when job choices are placed on the D.O.T. job hierarchy between black and white ethnic groups and between male and female students.

The Purpose

In working with students in career planning it appears

that those from culturally impoverished environments are less inclined to aspire to high status occupations than students from more favorable environments. While there is reason for this impression, the data base supporting this impression is not extensive. The purpose of this study is to report one such research effort. In this paper, a study will report where two populations, one white and one black, both culturally deprived and culturally advantaged seniors were assessed to determine the effects of the different environmental experiences on occupational aspirations as measured by their perceived abilities and manifest interest.

Limitation of the Study

Geographically, the reported study will be restricted to urban areas of Oklahoma City, Ponca City, Stillwater and Muskogee and the subjects will be limited to high school seniors from four different high schools. This being the situation, the results of the study should be used cautiously when generalized to populations different from the study sample.

Summary

Chapter I is an introduction to the problem studied. This chapter includes the statement of problem, the hypotheses, the purpose of the study and limitations of the study. Chapter II will review the related literature and its applicability to the present study. Chapter III presents

the methodology and design of the study and statistical methods used in evaluating the data. Chapter IV will contain statistical analysis of the data, and Chapter V consists of a summary, the conclusion and recommendations concerning the need for future research.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The objective of the present chapter, which surveys the related literature, is to bring into focus earlier research efforts which were established to be related to the present study. Since the broader scope of this study encompasses ethnic, socio-economic and sex influences on high school seniors' occupational aspirations, specific attention will be given to research studies related to these areas.

Review of Related Literature

Olive (1973) studied the occupational preferences of 197 male and 237 female high school students. All participating students were asked to choose any occupations they believed they might "like to enter." These preferences were then assessed for socio-economic status on a scale from 01 through 99 using the Bureau of the Census scoring method for socio-economic status. The Otis Quick scoring mental ability test was used as a part of this study to evaluate general intelligence.

Olive found that there was no significant difference between the male and female adolescents in terms of their general intelligence. However, when asked to indicate any occupation which they would "like to enter," the female group chose occupations with significantly higher social status than those chosen by the group of males.

Olive pointed out that even though the females aspired to higher status aspirations than did the males, they did not aspire to those occupations which were of highest status, such as high-level administrative positions or those requiring professional degrees. Their choices tended to focus upon professions which ranked just below the highest. These occupations, such as social work, teaching and secretarial work are among those traditionally considered as "feminine" occupations and which require less education than the highest status occupations.

Olive concluded that it is more difficult to counsel females than males because females may tend to suppress their interests in some potential occupation even though they possess the intellectual ability to succeed in these occupations.

Olive's findings that there are sex differences in terms of occupational preference supports a study by Omvig and Darley (1972) which was designed to ascertain the relationship between expressed and tested vocational interest for 99 male and female high school students from an inner city school in a community of 150,000 residents.

The researchers for the study used two instruments. The first was a locally constructed five-point Likert scale ranging from "like very much" to "dislike very much." Their instrument was used to gather data on "expressed vocational interest." The second instrument, used to gather data on "tested vocational interest," was the Ohio Vocational Interest Survey (OVIS) with assigned values ranging from 11 to 55. The data collected was analyzed using correlation analysis through the Pearson Product Moment correlation coefficient at a significant level of .01. If significant correlations were found, no difference between the expressed and tested vocational interest data would be accepted. Where nonsignificant correlations existed, the null hypothesis of no difference between expressed and tested vocational interest was rejected.

The findings of this study suggest that sex needs to be taken into account when relating expressed to tested vocational interest. In case of males, 21 of the 24 OVIS work areas displayed correlations sufficiently high to conclude that no significant difference existed between the expressed and tested interests. When females were tested only 13 of the 24 OVIS work areas displayed sufficiently high correlations.

The data obtained from this study indicates that expressed interest may be used more effectively in conducting vocational counseling with black males than black females. For males, a significant relationship exists between

expressed and tested vocational interest for 21 of the 24 OVIS work areas, and the correlations are consistently higher.

The vocational interests of black and white male college students were studied by Hager and Elton (1971). The sample of students consisted of 150 white freshmen males and 40 black freshmen males who completed the Strong Vocational Interest Blank (SVIB) during their freshman year testing program. The researchers used the inventory to assess the vocational interest of two groups of college freshmen. Both groups came primarily from similar socio-economic backgrounds and were familiar with low incomes. Hager and Elton found that blacks tended to register interest in social services occupations while white students were more likely to choose scientifically oriented occupational areas.

Gottlieb and Heinsohn (1977) conducted a study of educational goals of black and white high school seniors in segregated and interracial schools. The authors found that, of the group sampled, most indicated that they would prefer to attend college; however, while black students were more likely than white students to plan to go to college, white students were more likely to be accepted into college. Also, it was found that black students in interracial high schools had higher occupational aspirations than those in segregated schools.

Stephenson (1957) did a comparison study of plans and aspirations using 1,000 black and white high school students which revealed that Negroes had uniformly high aspirations but planned lower than whites and were less optimistic about their future plans. Their findings were based on data collected after administering a questionnaire designed to give students an opportunity to state both an occupational plan and an occupational aspiration. This was accomplished by first asking the student if he planned to quit high school, complete high school or go to college. At each of these educational alternatives the student was asked: "After you (quit high school, complete high school, graduate from college) what kind of work do you intend to do?" Stephenson's investigation distinguished between the aspirational plans in which he was able to conclude that occupational aspirations are not affected by race, whereas plans and expectations are more class-oriented.

In contrast to Stephenson's study, Gist and Bennett (1963) found that there were no significant differences in occupational aspirations and plans for education due to socio-economic class. However, it is noteworthy that Negroes had higher educational aspirations even when intelligence and social class status were controlled. The data to test these findings were collected from high school students in four large Kansas City high schools. The sample, which included all the students in two grades in four schools, was probably fairly representative of urban

students, except that neither the wealthiest nor the most impoverished school districts were represented. The number involved in the study was 412 Negroes and 461 white students. A questionnaire was administered for data collection.

These same findings, reported for samples of lower class youths in New York, reflect greater educational and occupational aspirations among Negroes (Smith and Abramson, 1962). This study population consisted of 33 Negro and 33 white high school students matched for age, sex, intelligence and social status who served as subjects to test the relationship between mobility aspiration measured by the three components of Rosen's Achievement Syndrome (achievement motivation, education, vocational aspiration level and class orientation) and two selected independent variables, race and family experience. The statistics used were rank order correlation and chi-square.

Specific findings were as follows: (1) the Negroes and whites did not differ in achievement motivation; (2) the achievement value orientation of the whites was significantly higher than that of the Negroes; (3) the Negroes had significantly higher educational and vocational aspiration, and, in contrast to the whites, valued success more than happiness in their careers.

In a similar study, Holloway and Berreman (1959) investigated the levels of educational and vocational aspirations, plans ("what one expects to work for and consider

possible for him," p. 56) and expectations of 313 lower and middle class black and white male students. It was discovered that the educational aspirations of both ethnic groups and classes were high, with lower classes having lower expectations of achievement. The expectations of the lower class blacks were not lower than those of lower class whites. Because only 15 students comprised the black middle sample, the findings that middle class blacks do not plan below their expectations may be unreliable. The vocational aspirations of the middle class white were higher than those of lower class whites and blacks. In none of the four ethnic-class groups did expectations differ from aspirations. It was reported that the middle class black males had low vocational aspirations; however, this finding may not be entirely reliable because of the limited sample size aforementioned. Holloway and Berreman (1959) concluded that plans vary with class position. Both black and white lower class males had plans below middle class males in vocational and educational areas.

Earlier research has suggested that the expressed educational and occupational aspirations of Negroes were higher than those of whites, Aaron and Lerner (1957). This study was designed first to test the hypothesis that differences between black and white students would be found with socio-economic status held constant and without any attempt to predict the direction of these differences. Secondly, the researchers hoped that the interview materials

would provide a better picture of the nature of the occupational choices as well as the background of the youth making the choices. The sample consisted of 69 Negroes and 64 white high school students. The instrument used for data collection was a questionnaire asking the students to respond to the following key questions:

(1) When you were in your first year of high school, what kind of work did you want to do when you grew up?

(2) Now what do you think you would like to do?

(3) Suppose your wildest dreams could be realized, and absolutely nothing would stand in your way, what would you be doing ten years from now?

(4) Thinking realistically, what do you think you will be doing ten years from now?

(5) How much money do you think you (for girls: and your husband) will be making ten years from now?

(6) Please tell me which of the statements on no. 76 on your sheet come closest to describing the way you feel about going to college or for further training (p. 134).

Based on the findings, Aaron and Lerner concluded: that Negroes have a higher level of aspiration than white with comparatively low socio-economic backgrounds.

Henderson (1966) conducted an exploratory study of the occupational aspirations of 200 Negro youths (males and females, ages 13 to 18) in a poverty-stricken area of a large city. Using the two basic types of aspirations, "ideal" and "real," he discovered that middle class Negro youths projected significantly less difference between

"ideal" and "real" aspirations than the impoverished youths.

The greatest difference between lower class and middle class youths were in their real aspirations. Eighty-eight point two percent of the lower class youths who ideally aspired for professional and managerial occupations did not realistically expect to attain such occupations, as compared to only 12.1 percent of the middle class youths who did not expect to obtain their "ideal" professional or managerial occupations. Most lower class youth realistically expected to engage in clerical or sales (44.7 percent) and semi-skilled (31.3 percent) occupations. Most middle class youths realistically expected to engage in professional or managerial (72 percent) and clerical or sales (20 percent) occupations.

Berman (1972) studied the relationship of ethnic group membership to occupational aspirations for a group of 545 female high school seniors. Berman found that aspirations were related to ethnic group membership. Blacks aspired to be nurses, secretaries and teachers, in that order. Puerto Rican students demonstrated a preference for secretarial, nursing and teaching occupations. Chinese females aspired to be teachers first, bookkeepers second and accountants third. The white group exhibited most interest in secretarial occupations with teaching and nursing following in order. For the most part, the occupations chosen were representative of traditional

female occupations. Some of the other factors explored previously by other investigators that Berman considered important to his study were: the most realistic period of occupational choice is between the ages of 16 and 18 or the latter half of one's high school studies; occupational decision-making is vastly influenced by socio-cultural factors; and the most important single influence on the occupational choice of youth is the family.

In order to further examine the influence of socio-cultural factors on occupational aspirations, Berman analyzed occupational aspirations on the basis of ethnic group and academic achievement by the use of a questionnaire. The results of the study indicated that over 50 percent of the graduates desired to enter traditional female occupations: secretary, nurse and teacher. There was only a small portion of the students who desired enter an occupation where a college education is necessary. Generally speaking, the occupations desired tended to be occupations where status is acquired with a minimum of education.

When considering academic achievement, occupational aspirations of honor roll students tended to be different from those of the total class for all ethnic groups. Students on the honor roll showed a preference for college-oriented occupations.

Based on these findings, Berman views socio-cultural factors as limiting the perspectives of occupational

aspirations both in the range of occupational choice and in the desire for higher occupational status.

Cosby and Picou (1973) observed that studies of the relationship of race to occupational aspirations have led to contradictory conclusions. They attempted to overcome the deficiencies apparent in other studies by computing effect estimates for four structural variables: father's education, father's occupation, residence and race.

The sample was comprised of 6500 high school students from four states in the deep south: South Carolina, Georgia, Alabama and Mississippi. The data were obtained using interviews conducted by an open-ended question instrument which read: "If you were completely free to choose any job, what would you most desire as a lifetime kind of work?" The determination of the comparability of this data with previous studies was done by using bivariate contingency tables constructed to examine the relationship between aspirations and lack of the independent variables. Tests of statistical significances were computed for illustrative purposes, and statistically significant associations were found in each of the four tests as determined by chi-square.

High level occupational aspirations were found to be associated with high level father's occupation and education. Farm students had higher aspirations than did students from small town and rural nonfarm areas. Only slight

differences were observed between small town, rural non-farm and farm students, and white students had slightly higher aspirations than black students. Although all the associations were found to be statistically significant, it should be noted that the strength of the association in the various tests ranged from moderate to very weak.

The Cosby and Picou findings support the career development theorists who emphasize the importance of social class background in influencing vocational choice. One of the earliest theorists was Ginzberg who, along with Ginsberg, Axelrod and Herma (1951) studied the effects of social class on vocational choice. They concluded that boys from lower socio-economic status followed the same general pattern as did those from more favored homes, but an increase in passivity was exhibited by boys from lower income families. During their earlier years, the disadvantaged were just as concerned about their future occupations as were the more advantaged youths. However, the disadvantaged individual became less inclined to actively pursue the realization of his aspirations.

According to Ginzberg et al. (1951) these same factors are operative not only in occupational choice but in educational choice as well:

Boys from the upper income families take it for granted, even in childhood, that they will attend college. Their fathers are professional men or have responsible positions in business or government. Family friends come from the same occupational background. It is not surprising,

therefore, that these adolescents in the upper income families think of their occupational futures in terms of the professions or executive positions in management. The background of children from the lower income families is different: they have little or no contact with college graduates or with persons in the professions, and therefore they are less likely to think of attending college (p. 73).

Super (1953) also considered the importance of social class when he developed his proposition on career development. One proposition identified the individual's parental socio-economic level as a major determiner of career patterns since the early contact which the individual has with the world of work is largely through parents, family and friends. Reports of research directed toward vocational interests of culturally different groups indicate that youth from higher socio-economic backgrounds generally aspire to enter occupations which are perceived as being higher in status (Sewell, Haller and Strauss, 1957).

In summary, contradictory findings characterize the research literature concerning the relationship between race and occupational aspirations. (1) Black youth have higher status occupational orientation than whites (Aaron and Lerner, 1957; Cosby and Picou, 1973); (2) black and white youth have similar occupational orientations (Cosby and Picou, 1971); (3) white youth have higher status occupational orientations than black youth (Hager and Elton, 1971).

These incongruent findings suggest that the relationship of social origin to occupational aspirations may be complicated by the racial variable. This study will examine the relationship between the variables discussed above and occupational aspirations by investigating how occupational choice related to the manifest interest and the perceived abilities of seniors who are ethnically different and come from middle and lower socio-economic statuses.

CHAPTER III

METHOD AND PROCEDURE

Introduction

This chapter contains a description of the sample population, the design of the study, a description of the instruments and their application to the study, testing procedures and statistical methods employed in the study.

Design of Study

During the spring of 1977, 200 seniors participated in a study of perceived ability, manifest interest and occupational choice. Each of the subjects was given two instruments. This testing took place at four different schools involving 50 seniors from each school. All students were given the same instructions for completing the two instruments. The investigator administered the instruments to each of the groups.

Subjects for the study were seniors from four different high schools in Oklahoma City, Ponca City, Stillwater and Muskogee. The subjects were selected during the spring semester of the 1976-77 school year. Millwood (Oklahoma City) and Muskogee were chosen because they had a high enrollment of black students from lower and middle class

standings. Millwood School is 90 percent black with the highest percentage of blacks from middle class families. Although Millwood is located in the Oklahoma City area, it is not a part of the Oklahoma City school system.

Muskogee High School is located in northeastern Oklahoma; it is the only high school in the city and has an enrollment of over 2,000 students. The black students in attendance at Muskogee are from families of lower and middle socio-economic levels.

Ponca City High School and C. E. Donart High School in Stillwater are two predominately white high schools. Most of the seniors in the two schools were white middle class students whose parents held high socio-economic positions in the community. Stillwater High School is located in a community of central Oklahoma of about 40,000 people, including students at Oklahoma State University. Ponca City is located about 40 miles north of Stillwater, just south of the Kansas-Oklahoma Border. The city has a population of about 30,000 people with a high school enrollment of approximately 1,500. The city is noted for its oil production. Tables I and II show the number of students used in this study and the composition of the students in terms of socio-economic levels and by ethnic classification.

Statistical Method

Writers indicate there is no statistic to test for significant difference in rho coefficients. There is also the

TABLE I
SCHOOLS AND NUMBER OF STUDENTS
USED IN THIS STUDY

Schools	No. of Students
Muskogee High School	50
Ponca City High School	50
Stillwater High School	50
Millwood High School (Oklahoma City)	<u>50</u>
Total	200

TABLE II
NUMBER OF STUDENTS IN STUDY BY
CLASS, RACE AND SEX

Female		Male		No.	Total
White Middle Class	26	White Middle Class	24	24	50
White Lower Class	23	White Lower Class	27	27	50
Black Middle Class	21	Black Middle Class	29	29	50
Black Lower Class	<u>30</u>	Black Lower Class	<u>20</u>	<u>20</u>	50
Total	100	Total	99	99	

statement that rho, as an estimate of a Pearson r, may be treated as a Pearson r for testing level of significance and for significant difference between rho coefficients Guilford (1956). To test the significant difference between two Pearson r's, since a distribution of r's will be skewed, the r's must be converted to z coefficients as follows (McNemar (1949):

$$z = 1.1513 \log_{10} \frac{1+r}{1-r}$$

The standard error of z is obtained by

$$\sigma z_1 - z_2 = \frac{1}{N_1 - 3} + \frac{1}{N_2 - 3}$$

$$"t" = \frac{r_1 - r_2}{\sigma z_1 - \sigma z_2}$$

Definition of Terms

Socio-economic status of lower class--For the purpose of this investigation, lower class is the child's social position determined by the parents' (head of household) occupational and educational levels. The combined score earned on Hollingshead's Two Factor Index of Social Position will be used to determine the child's social class position.

Middle Class--For the purpose of this investigation, middle class is the child's social position determined by the parents' (head of household) occupational and educational levels. The combined score earned on Hollingshead's Two Factor Index of Social Position will be used to determine a child's social class position.

Aspirations--Represents the future occupational plan where the student has prepared himself to aspire to specific occupational goals.

Ethnic--In this study is used to include only Black-American and Anglo-American high school seniors.

Manifest Interest--is defined as "synonymous with participation in an activity or an occupation" (Crites and Super, 1962, as reported by Ewens, 1976).

Perceived Ability--Perceived ability being interpreted as a concept of self (as reported by Ewens, 1976).

Instruments

Data were collected from the sample population by means of the Activity Experience Inventory (AEI) and the Perceived Ability Card Sort. The Hollingshead Two Factor Index of Social Position was used to determine social class status for the subjects of the study.

These instruments were administered to the students by the investigator with the assistance of the administrators at the respective schools. The students were previously informed by the investigator of the general purpose

of the research study but not appraised by the hypotheses being investigated. An attempt was made to give them some appreciation of the potential importance of the students' participation in the study for which their cooperation was being solicited.

The students were instructed simply to answer the questions with respect to themselves. They were told that there were no right and wrong answers to the questions and to simply share their own opinions. Therefore, they were asked to answer the questions honestly; that is, to simply note their own opinion. Those who had questions were told to answer as they thought best. Although the questionnaires called for personal identification data, the students were assured anonymity and told that neither their parents nor school personnel would see any of their responses.

In general, completion of the two instruments took about 60 minutes. Each instrument was printed on a separate data sheet and given to each student individually.

The AEI measures experience in the 10 Kuder Preference Record areas using a five point scale varying from no experience (0) to a large amount of experience (4). For each of the interest areas there are 25 experience items. Validity for interest areas of the AEI vary from .27 to .82 with a median of .39 when scores on the AEI were correlated

with experience rankings from an Experience Data Blank. The split-half reliability coefficients ranged from .87 to .97 with a mean of .90 for high school males and for high school females the coefficients ranged from .82 to .92 with a mean coefficient of .89.

Perceived ability was determined by asking each student to order ten cards from greatest amount of ability to least amount of ability. Each of the ten cards showed one of the Kuder categories and several job titles appropriate for the interest area. Students were asked to rank the abilities before marking experiences on the AEI in order to reduce the possibility of confounding the data.

The test-retest data for 11th grade students (two English classes), with a six month interval between testing, was used to determine the reliability of the card sort of perceived abilities. The six month interval was used to reduce the amount of recall from the first ranking of abilities. The six month interval may have resulted in some real changes in perceived abilities due to evaluation of intervening experiences and, therefore, depressing the reliability coefficients. The median rho coefficient for 42 students was .76.

Hollingshead's Two Factor Index of Social Position Scale (1957) was developed to meet the need for an objective, easily applicable procedure to estimate the positions individuals occupy in the status structure of our society.

Its development was dependent both upon detailed knowledge of the social structure and procedures social scientists have used to delineate class position. It is premised upon three assumptions:

- (1) the existence of a status structure in the society
- (2) positions in this structure are determined mainly by a few commonly accepted symbolic characteristics
- (3) the characteristic symbolic of status may be scaled and combined by the use of statistical procedures so that the researcher can quickly, reliably and meaningfully stratify the population under study (Hollingshead, 1957, p. 12; Hollingshead and Redlick, 1958, p.398-407).

The socio-economic status of each subject involved in this study was determined with the use of Hollingshead Scale. This scale consists of two factors which he feels are essential in determining an individual social position. They are: (1) the head of household's exact occupational role performed in society; and (2) the head of household's amount of formal schooling. These two factors are then scored according to the appropriate education or occupational scoring procedure.

The occupational scale is founded on the assumption that occupations have different values associated with the by members of society (Hollingshead, 1957). This scale has a hierarchal range of seven occupational position categories: (1) higher executives, proprietors of large concerns

and major professionals; (2) business managers, proprietors of medium sized businesses and lesser professionals; (3) administrative personnel, small independent businesses and minor professionals; (4) clerical and sales workers, technicians and owners of little businesses; (5) skilled manual employees; (6) machine operators and semi-skilled employees; and (7) unskilled employees or unemployed persons.

The educational scale is based on the assumption that individuals who have similar education will tend to have similar tastes and similar attitudes and will also tend to manifest similar behavior patterns (Hollingshead, 1957). The educational scale is categorized according to seven positions: (1) graduate or professional training; (2) standard college or university graduates; (3) partial college training; (4) high school graduates; (5) partial high school; (6) junior high school and (7) less than seven years of school.

The occupational and educational factors are interpreted by weighing the single scores ascertained from the scale position. The weight attached to each factor is:

<u>Factor</u>	<u>Factor Weight</u>
Occupation	7
Education	4

An individual's Index of Social Position score is computed from the scale value for occupation which is multiplied by the factor weight for occupation and the scale

value for education is multiplied by the factor weight for education. For example, Henry Jones is a private secretary for an attorney and has completed high school with two years of college. His Index of Social Position would be computed as:

<u>Factor</u>	<u>Social Score</u>	<u>Factor Weight</u>	<u>Score X Weight</u>
Occupation	4	7	28
Education	3	4	<u>12</u>
Index of Social Position Score			40

Scores on the Two Factor Index of Social Position can be arranged on a continuum; scores ranging from a low score of 11 to a high score of 77. This continuum may be divided into score groups. Individuals and families with scores that fall into a given segment of the range of scores assigned to a particular class are presumed to belong to the class the Two Factor Index of Social Position score predicts for it (Hollingshead, 1957).

The Two Factor Index of Social Position was used in this study to identify two socio-economic status groups--middle and lower. For purpose of this study, the continuum was broken down into two separate groups where two raw score clusters displayed heterogeneity between 40-48. There were no scores found in this range. Thus, the two raw score clusters contained scores within ranges 11-40 and 48-77. Differences in individual scores within each range were ignored, thus treating each score range as a unit. Hollingshead and Redlick (1958) stated that:

Where there was homogeneity in the patterns of the raw scale scores, and congruety of these scores with judged class position, we assumed that the cluster was indicative of a functional segment of the community status system. Where there was heterogeneity in social clusters, we assumed there was indeterminacy in the status system. Thus the inference was made that social position scores should cut at the point of most heterogeneity in the scale score pattern (p. 395).

Summary

This chapter has included the design of the study, a description of the population, a description of the instruments and their application to the study, testing procedures, statistical methods employed in the study and definition of terms.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Introduction

The purpose of this chapter is to present the data that were collected relative to each of the three hypotheses. Following the discussion of data the hypotheses will be tested to permit a judgment to determine if the hypotheses are accepted.

Hypothesis One

There will be no significant difference in the relationship between manifest interest and perceived abilities of middle and lower socio-economic students; between black and white ethnic students; between male and female students of the study group.

Table III presents the results of the hypothesis related to Spearman Rho correlations between manifest interest and perceived abilities of middle and lower socio-economic students. The rho coefficient (+.44) shown in the table indicates a higher relationship between perceived ability and manifest interest for middle socio-economic students compared to the lower socio-economic students.

The rho coefficient of (+.28) represents the lower socio-economic students.

It should be noted that there were significant findings at the .05 level for both of the above rho coefficients relative to perceived ability and manifest interest of middle and lower socio-economic students, although the middle socio-economic students' rho coefficients had a greater value. This level of significance was determined according to Blalock (1972) in the text Social Statistics. The statistical method is described on page 559.

The computed Spearman Rho values of perceived ability and manifest interest for black and white ethnic students, as shown in Table III, for the four groups (white middle class, black middle class, white lower class and black lower class) reveals that the coefficients range from (+.40) to (+.67). Table III shows that the white middle class rho coefficient of (+.67) between perceived ability and manifest interest is the most positive relationship. The rho coefficient of (+.63) for black middle class was the second highest rho followed by white lower class students with a rho coefficient of (+.59) and black lower class students with a rho coefficient of (+.40). Although there is a difference in the size of these correlations, at the .05 level they are all significant, which supports the assumption that there is a positive relationship between perceived ability and manifest interest

TABLE III
 SCORES OF MANIFEST INTERESTS AND PERCEIVED
 ABILITY BY ETHNIC GROUP

Range of Scores	Ethnic Group				Class		Sex	
	White Middle	Black Middle	White Lower	Black Lower	Middle	Lower	Male	Female
90-99	2	2	2	1	4	3	3	4
80-89	9	3	4	5	12	9	16	12
70-79	12	11	13		23	13	18	17
60-69	10	11	6	3	21	9	17	17
50-59	3	6	9	5	9	14	12	8
40-49	6	5	1	6	11	7	13	14
30-39	2	4	4	8	6	12	8	9
20-29	0	3	5	6	3	11	10	8
10-19	3	3	3	3	6	6	11	10
0-9	2		1	4	2	5	2	8
-10-01	0	2		5	2	5	4	
-20-11	0		1	1		2		2
-30-21	0			3		3		
-40-31	0			1		1		
-50-41	1		1	1	1	2		
N	49	50	50	51	99	101	94	106
Rho	.67*	.63*	.59*	.40*	.44*	.28*	.27*	.24*
Z	.81	.74	.68	.42	.47	.29	.28	.24
t		.11		.40		.28		.06

t (.05 level of significance) = 2.267

*Significant at the .05 level.

for all the groups, with differences being variations in correlation size.

There was a significant relationship at the .05 level between perceived ability and manifest interest relative to male and female students of the study group. A Spearman Rho value of rho coefficient (+.27) for male students is presented in Table III. Also, the Spearman Rho value rho coefficient of (+.24) for female students is represented in Table III. These two rho coefficients shown for male and female students represent the lowest relationship between perceived ability and manifest interest of the three comparison groups.

To test hypothesis one, rho coefficients were converted to z scores and the "t" scores were determined to test the significant differences in z scores. From Table III one notes that the z score for the middle class black and middle class white students was .81 and .74, respectively for a "t" value of .11. The t score indicated that these two groups of students were not significantly different in terms of their relationship between manifest interest and perceived abilities. In like manner the t scores for the lower class ethnic black and white groups (.40), the t-scores for the middle and lower groups by class (.28) and the male and female groups (.06) were not significantly different in terms of the manifest interest and perceived abilities relationship.

Hypothesis Two

There will be no significant difference in the amount of experiences for students in the lower and upper socio-economic levels as indicated by their responses to the manifest interest items; for black and white ethnic groups; for the male and female groups.

Generally, Hypothesis Two seeks to determine if individuals differ in the amount of experience they have had exposure to relative to being a part of one of the aforementioned groups.

Appendix B, the Activity Experience Inventory, is used to determine the amount of background experiences of individual students in the study. The Activity Experience Inventory is made of individual students in the study. The Activity Experience Inventory is made of 250 items divided into ten different categories. In each of the ten categories there are 25 items for determining the amount of experiences each student had in each of the ten categories. Appendix D gives chi-square values for Activity Experience Inventory items by interest areas where there are significant differences in relationship to race, sex and class for the students involved in the study.

These significant differences are summarized in Table IV which gives the number of Activity Experience Inventory items that are significantly different by interest area, range of chi-square values and the chi-square medians.

TABLE IV
NUMBER OF AEI ITEMS AND CHI-SQUARES SHOWING
SIGNIFICANT DIFFERENCES BY INTEREST
AREAS AND BY RACE, SEX AND CLASS

Category	Race			Sex			Class		
	Items*	X ² Range &	Median	Items*	X ² Range &	Median	Items*	X ² Range &	Median
Outdoor	13	10.27-78.61	17.50	7	10.99-35.36	25.86	1		
Mechanical	9	10.28-78.61	24.42	14	15.06-97.77				
Computational	2	8.67-10.29	9.48	4	9.63-78.61	40.38	1		
Scientific	5	11.28-20.55	11.28	5	10.48-62.93	11.95	2	10.76-10.16	10.94
Persuasive	1	9.97		0					
Artistic	3	11.04-16.13	16.13	1	35.07		1		
Literary	4	11.30-11.47	9.68	3	12.60-47.48	13.79			
Musical	0	0		2	13.71-14.42	14.06			
Social Service	2	10.95-40.83	25.89	4	14.33-60.96	28.79			
Clerical	5	10.35-13.44	11.95	2	13.91-15.06	14.38	1		
Total	44			42			6		

*Number of Experience items where groups indicated significant difference in amount of experience by experience area.

Significant at the .05 level of confidence.

The data presented in the table was determined by utilizing data from Appendix B. For purposes of discussion, reference will be made to both appendixes for more detail relative to Hypotheses Two and Table IV. Also, it should be noted in Table IV, the division of the three variables; race, sex and class, showing the number of Activity Experience Inventory items that are significant to each of the three variables in relationship to each of the ten categories that make up the Activity Experience Inventory. Hypothesis Two is not accepted since Table IV shows 92 of the Activity Experience Inventory items where there were significant differences. As shown in Table IV there were more items showing a statistical significance when study participants were grouped according to race. The category with the most statistical significant items was "outdoor," with 13 items, a chi-square range from 10.27 to 78.61 and a median of 17.80.

These items of significance resulted from the responses made by individuals from both ethnic groups after taking the Activity Experience Inventory. The black students had more background outdoor experience in areas related to sports and farming, while the white students' background outdoor experiences surpass blacks in areas related to exploration trips, hiking and attending summer camps and sailboating.

The following Activity Experience Inventory items exemplifies the type of statements statistical differences occurred.

1. Have you played football, baseball, tennis and other outdoor games?
2. Have you cared for cattle, horses or other farm and ranch animals?
3. Have you gone on hikes?
4. Have you attended summer camps?

(See Appendix B for additional statements.)

Data in Table IV indicates that the mechanical category with nine significant different items listed under race as being the category with the second highest number of significant different items. There significant different items were a result of white students having more background experience in areas related to building different models and reading Popular Science Literature. Some of the items were:

1. Have you built model airplanes, locomotives, ships?
2. Have you taken mechanical equipment apart to see how it works?
3. Have you read Popular Science or Popular Mechanics?
4. Have you played with erector sets, mechanic sets, etc.?

Table IV also indicates that the musical category has statistical significant different items under race. Reference to Table IV indicates that category mechanical under the variable sex has the largest number of significant

different items listed with chi-square values ranging from 15.06-97.77 and a median of 41.38. The statistical difference occurred because a number of male subjects indicated more background experiences in mechanical skills than the female participants. Some of the items were:

1. Have you changed tires on a car or bicycle?
2. Have you planted, cultivated and harvested crops with power machinery?
3. Have you had a course in mechanical drawing?

Reference to Table IV indicates the category outdoor showing the second largest number of statistical different items with a chi-square ranging from 10.99 to 35.56 and a median of 25.86. The items that were statistically different indicated a greater number of male participants having more experience in outside activities than the female participants. Some of the items were:

1. Have you trapped wild animals or birds?
2. Have you tamed wild animals?
3. Have you attended fairs to see livestock and farm product exhibits?

The Persuasive Category had no statistical significant different items according to sex, and data from Table IV indicates that class has the least amount of statistical different items when compared to race and sex.

Hypothesis Three

There will be no significant difference in the level of job choice for students from lower and middle socio-

economic levels when job choices are placed on the D.O.T. job Hierarchy; between black and white ethnic groups; between male and female students.

Stated in different terms, Hypothesis Three states that the variables class, sex and race do not have differential effects of levels of job choice made by subjects in the study. The job choices as indicated in Table V were determined by asking each participant to complete a Personal Data Questionnaire indicating their career goal as a response to one of the questions on the questionnaire. This questionnaire is in Appendix A.

The job choices presented in Table V represents the career goals of the participants in the study. The job choices are divided into high, middle and low classification as described in Chapter V.

The data shows 14 occupational choices made by participants in the column of "High" classification. These 14 occupations were career choices of 90 participants in the study. The field of Business, with 14 participants making this choice, represents the occupation getting the greater number of participants' interest. The career choices representing the "middle" classification had 69 participants decide on these choices, with the teaching profession chosen the greater number of times.

The career choices representing the "low" classification had 41 participants to make occupational choices.

TABLE V
CAREER CHOICE

Job Choice Frequency	High	Job Choice Frequency	Middle	Job Choice Frequency	Low
12	Medical Doctor	2	Data Processing	12	Secretary
5	Chemist	2	Computer Progammng	5	Welding
12	Engineer	13	Nurse	6	Auto Mechanic
1	Pathologist	4	Bookkeeping	2	Electrician
14	Business	1	T.V. Technician	1	Carpenter
10	Lawyer	1	Drafting	2	Armed Forces
2	R. N. Nurse	1	Dairy Farmer	1	Day Care Worker
3	Accountant	3	Journalism	1	Cook
6	Veterinarian	1	Postal Clerk	1	Butcher
6	College/University Professor	1	Home Economist	1	Cashier
1	Astronomer	20	Teacher	2	Receptionist
2	Geologist	1	Purchasing Agent	1	Security Guard
1	Historian	1	Insurance Agent	2	Telephone Oper- ator
10	Psychologist	2	Professional Sports	1	Waitress
		1	Social Worker	1	Typist
		1	Artist	1	Stewardess
		1	Musician	1	Machinist
		4	Fashion Merchandising		
		1	Speech Therapist		
		6	Counselor		

The participants chose secretary 12 times, which was high for "low" classification. To elaborate further, this table provides all of the job choices made by participants in the study relative to their occupational aspiration.

Table VI presents the following data: In column one the groups' classification is given. In columns two through four, the number of job choices are reported, based on high, middle and low classifications. In column four total frequencies are given and column five reports the chi-square values.

The social class groups in Table VI were determined by the Hollingshead Two Factor Index of Social Position (1957). The Two Factor Index was used in this study to identify two social-class groups' middle and lower, as indicated in Table VI. There are two factors essential in determining the social class of a person: (1) the head of household's occupational role and (2) the head of household's formal education. These two factors are scored separately according to the appropriate educational or occupational scale.

The data in Table VI presents the results of chi-square analysis showing no statistical difference at the .05 level between lower and middle socio-economic levels; black and white ethnic groups; or male and female groups.

TABLE VI
JOB CHOICE BY CLASS, RACE AND SEX

Groups	Job Choice			Total Frequencies	Chi-Square Value
	High	Middle	Low		
<u>Class</u>					
Lower	40	36	24	100	$X^2=3.459$
Middle	51	31	18	100	$P = .176^*$
<u>Race</u>					
Black	47	34	22	100	$X^2=0.092$
White	44	33	23	100	$P = .095^*$
<u>Sex</u>					
Male	39	26	24	94	$X^2=2.373.$
Female	52	41	21	106	$P = .306^*$

*Not significant at the .05 level.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter gives a general summary of the investigation. The summary is followed by important findings of the investigation and conclusions based on these findings. A final section will discuss recommendations for future research.

Summary

This study was concerned with determining the occupational aspirations of high school seniors from different socio-economic levels. The subjects for the study sample were 200 seniors from four different high schools. The schools were located in Oklahoma City, Ponca City, Stillwater and Muskogee. These schools were chosen because collectively they had the subjects needed for the study. Millwood and Muskogee were chosen because they had the highest enrollment of black students from lower and middle class standings. Ponca City High School and C. E. Donart High School in Stillwater are two predominately white high schools having students from lower and middle classes being a part of the student body.

The Instruments employed to collect data from the sample population were the Activity Experience Inventory and the Perceived Ability Card Sort. The Hollingshead Two Factor Index of Social Position was used to determine social class status for the subjects of the study.

This investigation analyzed data by ethnic groups, socio-economic status and sex with reference to measure of middle and lower socio-economic standings relative to each variable mentioned above.

The statistical techniques utilized in analyzing the data were Spearman's Coefficient of Rank-Order correlation and chi-square. For the first hypothesis, rho coefficients were calculated to determine the relationship between rank order of manifest interests and perceived abilities. For the second and third hypothesis, chi-square was used to analyze the data.

Research Conclusions

Three hypotheses were under consideration in this study. The conclusions will be drawn from each hypothesis and general conclusions will be discussed at the end of this section.

Hypothesis One: There will be no significant difference in the relationship between manifest interest and perceived abilities of middle and lower socio-economic students; between black and white ethnic groups; between male and female students of the study groups.

The following research conclusions seem valid based on the results reported in Table III of Chapter IV. The rho coefficient of (+.44) shown in the Table indicates a higher relationship between perceived ability and manifest interest for middle socio-economic students when compared to the lower socio-economic students with rho coefficient of (+.28).

The rho coefficient of (+.67) shown in the table indicates a higher relationship between perceived ability and manifest interest for white middle class students than any of the other groups represented in the table. The rho coefficient followed by white lower class students with a rho coefficient of (+.59) and black lower class students with a rho coefficient of (+.40). Although there is a difference in the strength of these correlations, at the .05 level they are all significant. This supports the assumption that there is a positive relationship between perceived ability and manifest interest for all the groups, with differences being variations in the size of the correlations.

Although the two rho coefficients shown on Table III representing the male and female students are the lowest relationships between perceived ability and manifest interest of the three comparison groups, there still exists a significant relationship at the .05 level of significance.

In conclusion, data from Table III suggests that there was a positive relationship between perceived ability and

manifest interest for the subjects in the three comparison groups. Also, for these two variables, the table shows that there were no significant differences between rho coefficients for the lower and middle black and white students, the groups by sex or the groups by class.

Hypothesis Two: There will be no significant difference in the amount of experiences for students in the lower socio-economic levels as indicated by their responses to the manifest interest items; for the black and white ethnic groups; for the male and female groups.

Based on the results reported in Chapter IV, the following research conclusions seem valid. The data suggest that there are significant differences in the amount of experiences for some students in the above three comparison groups. As a result of their responses to items listed on the Manifest Interest Inventory and employing chi-square statistic to determine the level of significance this conclusion was determined.

Hypothesis Three: There will be no significant difference in the level of job choice for students from lower and upper socio-economic levels when job choices are placed on the D.O.T. job hierarchy between black and white ethnic groups; between male and female students.

Based on the results reported in Chapter IV, the following research conclusions were drawn. It is shown, as a result of using chi-square analysis, that there is no significant difference at the .05 level between lower and

middle socio-economic participants; black and white ethnic groups; or males and females when job choices are made according to the D.O.T. job hierarchy.

General Conclusions

The following conclusions seem valid based on the results of this study outlined in the above section.

(1) Table III indicates that there is a positive relationship between perceived ability and manifest interest relative to middle and lower socio-economic status seniors. This supports the assumption that there is a positive relationship between the two.

(2) Reference to Table IV indicates that lower and middle socio-economic status seniors relative to their responses on the Manifest Interest Inventory showed a significant difference in some of the experience items. For example, middle socio-economic white seniors showed significantly greater experience in the following items:

Have you collected antiques?

Have you collected copies of famous paintings?

Have you read Popular Science or Popular Mechanics?

Have you played with erector sets, mechanic sets, etc.?

Have you gone canoeing, boating or sailed a sailboat?

It might appear that the reason for black students not having experiences in the type of activities above are because of economic factors and opportunities. Historically,

blacks have not had the financial resources to participate in activities such as those listed above and in some cases cultural barriers have prevented their involvement. If additional study supports this basis for differences in experiences and if experiences are shown to be important factors in career planning, it appears that schools and other community agencies have a responsibility to provide students from deprived families additional experiences as the basis for career planning.

(3) Reference to Table IV indicates that there are no significant differences between lower and upper socioeconomic levels when job choices are made, according to the D.O.T. job hierarchy.

Discussion

In view of the fact that the expected findings did occur relative to the underlying assumption that there is a positive relationship between perceived ability and manifest interest; considerable evidence has been presented relevant to the importance of the two instruments when used in determining the relationships that exist between ethnic groups, class and sex. Certainly, the rho coefficient showing significant relationship between the two instruments implies the importance of their use in helping with career decision making.

This study also focuses emphasis on the importance of "experience" that the person has with people, things and

events; as helping to determine the career development process. The manifest interest scale was used in the study to measure the amount of experiences a person encounters in his/her environment. There were high percentages of manifest interest items showing significant differences in relationship to ethnic groups, class and sex.

The study showed that certain individuals had more experience in certain categories than others. This type of information would certainly be helpful in career decision making.

Another important factor brought out in the study was that there were no significant differences in job choice made by participants in the study relative to sex, class and ethnic groups.

Suggestions for Future Study

The following suggestions are made as a result of this study.

(1) The study should be replicated exactly in order to assess the reliability of the results and to establish more clearly the relationship between perceived ability and manifest interest.

(2) The author feels that similar studies should be conducted with ample groups from other populations, such

as freshmen in college and adults; similarly, other socio-economic groups and ability groups should be used.

Concluding Comment

Hopefully, this study will facilitate the understanding of the Perceived Ability Card Sort and its relationship to the Manifest Interest Inventory relative to occupational aspirations, and perhaps will serve as a catalyst for counselors and educators in helping students make career decisions.

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APPENDIXES

APPENDIX A

PERSONAL DATA QUESTIONNAIRE

1. Sex. Please check the appropriate classification.
Male _____ Female _____
2. Ethnic origin.
Indian _____ Black _____ White _____ Other _____
3. What is your career goal? _____

Education

4. How much education did your mother complete in school?
Place one check mark in only one of the blank spaces below which best answers the question for you.

a. ___ elementary school (grades 1-6)	(28)
b. ___ junior high school (grades 7-9)	(24)
c. ___ some high school (grades 10 or 11)	(20)
d. ___ completed high school (grades 10-12)	(16)
e. ___ business school, vocational school, or technical school	(12)
f. ___ some college (1-3 years)	(12)
g. ___ completed college (4 years)	(8)
h. ___ graduate or post-graduate school (master's degree, doctorate degree, medical doctor's degree, etc.)	(4)
i. ___ don't know	
5. How much education did your father complete in school?
Place one check mark in only one of the blank spaces below which best answers the question for you.

a. ___ elementary school (grades 1-6)	(28)
b. ___ junior high school (grades 7-9)	(24)
c. ___ some high school (grades 10 or 11)	(20)
d. ___ completed high school (grades 10-12)	(16)
e. ___ business school, vocational school, or technical school	(12)
f. ___ some college (1-3 years)	(12)
g. ___ completed college (4 years)	(8)
h. ___ graduate or post-graduate school (master's degree, doctorage degree, medical doctor's degree, etc.)	(4)
i. ___ don't know	
6. What is your father's occupation? (If you are not living with your real father, answer for step-father, foster father, etc.)

7. What is your mother's occupation? (If you are not living with your real mother, answer for step-mother, foster mother, etc.)

APPENDIX B

ACTIVITY EXPERIENCE INVENTORY SCALE

ACTIVITY EXPERIENCE INVENTORY

by

Wm. Price Ewens

This is not a test but is designed to give you an opportunity to indicate the amount of experience you have had in certain activities. On the answer sheet provided indicate your experience in each activity using the numbers 0 through 4 with these numbers having the following meanings:

- (0) - No experience in the activity
- (1) - A small amount of experience in the activity
- (2) - Have had occasional experience in the activity
- (3) - Frequently or often experience the activity
- (4) - A large amount of experience in the activity

In the following example two activities will further illustrate the above definitions as well as the method of marking the answer sheet.

EXAMPLES

Have you

- 1. painted with water colors? 1. 0 1 2 3 4
- 2. helped people with books in a library? 2. 0 1 2 3 4

By making a circle around 3 in response to the first activity, more than "occasional experience" painting with water colors has been indicated but less than a "large amount of experience." In the second activity, the circle around 1 indicates a "small amount of experience" in helping people find books in a library but not as much experience as "occasional" which would be a marking of 2.

When the directions are understood you are ready to open the booklet and to mark your experience in the listed activities as illustrated in the examples.

Have you

1. cultivated and cared for vegetables, flowers or other garden products?
2. planted, cultivated and harvested crops with power machinery?
3. attended fairs to see livestock and farm product exhibits?
4. played football, baseball, tennis and other outdoor games?
5. cared for cattle, horses or other farm and ranch animals?

Have you

6. repaired household implements, such as vacuum cleaners, electric toasters, sewing machines?
7. made your own toys, such as coaster wagons, kites, doll houses, etc.?
8. mended broken articles with solder or liquid cement?
9. read Popular Science or Popular Mechanics?
10. built model airplanes, locomotives, ships, etc.?

Have you

11. figured costs or profits for a school concession stand or other activity?
12. kept record of automobile mileage or gasoline consumption on long trips?
13. been a member of committees to purchase supplies for a party?
14. been business manager of a yearbook or school paper staff?
15. kept record of your allowance and how the money was used?

Have you

16. studied wild animals or bird life by observing nesting, feeding, migration, etc.? 16
17. experimented with batteries, vinegar, salt, or other common commodities?
18. made a collection in insects, birds' nests, interesting rocks, etc.?
19. tried to figure out predictive signs of weather for your community?
20. studied rock and soil composition and reasons for land formations?

Have you

21. taken an active part in school elections by campaigning for yourself or a friend?
22. given speeches to convince others of the desirability of a product, play, etc.?
23. led discussion groups in church, Boy Scouts, Girl Scouts, club groups, etc.?

24. interviewed people over the telephone in a survey of public
25. participated on a membership committee for a club or organization?

Have you

26. participated in craft hobbies such as leather work, woodcarving, ceramics, etc.?
27. decorated or planned the decorations and furnishings for your own room?
28. contributed drawings to the school paper, yearbook or magazine?
29. done sign painting, printing or made posters for school or social functions?
30. woven rugs or baskets, or embroidered scarfs, pillow slips, etc.?

Have you

31. written plays or skits that were used by groups in your school or community?
32. read works of a given author because of interest in his literary style?
33. read articles of a columnist because of his literary style?
34. written poems or prose which was printed in the school paper?
35. written stories for the school paper, magazine or yearbook?

Have you

36. collected records or belonged to a group which listened to popular records?
37. followed the music of a selection while it was being played?
38. composed new tunes to sing or to play on a musical instrument?
39. watched rehearsals of an orchestra, band, glee club, etc.?
40. played wind instruments such as a horn, flute, etc.?

Have you

41. worked for the improvement of some undesirable condition in your school or neighborhood?
42. worked on drives for charitable funds, such as Christmas Seals, March of Dimes?
43. taught children to make model airplanes, ships, dolls, furniture, etc.?
44. helped prepare or deliver boxes of food, clothing, etc. to the needy?
45. been a member of YMCA, YWCA, Hi-Y, Boy Scouts, Girl Scouts, etc.?

Have you

46. estimated and collected the expenses for a club picnic, party or other activity?
47. been business manager of an organization, e.g., school play, athletic team?
48. addressed envelopes in preparation for sending invitations?
49. filed correspondence or papers for teachers or businessmen?
50. operated an adding machine or similar office equipment?

Have you

51. hunted and made a collection of Indian relics?
52. planted or cared for trees, shrubs, lawns?
53. gone canoeing, boating or sailed sailboats?
54. raised chickens, turkeys or other poultry?
55. picked cotton, fruit, nuts, berries, etc.?

Have you

56. taken mechanical equipment apart to see how it worked?
57. built bird houses, dog houses or like objects?
58. read technical books and articles on mechanics?
59. played with erector sets, mechanic sets, etc.?
60. taken apart or fixed clocks or watches?

Have you

61. kept the financial account for an organization or club?
62. worked on jobs that required mathematical computation?
63. worked in the billing office of a store of business?
64. volunteered to keep score when playing cards?
65. worked on a job that required making change?

Have you

66. challenged generalizations made without supporting evidence?
67. made drawings of bacteria observed through a microscope?
68. been a member of a group taking science field trips?
69. read current literature concerning scientific studies?
70. studied the nature of diseases and possible cures?

Have you

71. written ads or publicity for school or community activities?
72. had charge of arrangements of a meeting, party or program?
73. had courses in public speaking, salesmanship or dramatics?
74. sold seeds, stamps or other articles in your neighborhood?
75. collected money for community or school projects?

Have you

76. attempted to reproduce a scene on paper or canvas?
77. copied sketches of people, animals or buildings?
78. studied art beyond that required in school?
79. made flower arrangements for decorations?
80. made a scrapbook of pictures or paintings?

Have you

81. collected a library of your favorite books?
82. kept written notes on personal experiences?
83. read book reviews of current publications?
84. written reports for committee meetings?
85. corresponded with friends or relatives?

Have you

86. played string instruments such as piano, violin, etc.?
87. read books on the history and development of music?
88. looked up the story of an opera before attending?
89. appeared as a vocalist in a musical production?
90. sung in harmony with a group of friends?

Have you

91. taught children to use modeling clay, crayons, paints, etc.?
92. helped people get acquainted by making introductions?
93. made collections for the needy at Christmas time?
94. helped other students with their school work?
95. made things to be distributed to the needy?

Have you

96. read proof for a school paper or other publication?
97. acted as timer for workers or at sports activities?

98. been secretary for a club or for an individual?
99. used a mimeograph or duplicating machine?
100. worked in an office as a clerical worker?
Have you
101. trailed animals or persons in the woods?
102. trapped or raised fur bearing animals?
103. pruned and repaired damaged trees?
104. grafted trees or other plants
105. trapped wild animals or birds?
Have you
106. repaired damaged utensils in your home?
107. had courses in mechanical drawing?
108. repaired or refinished furniture?
109. changed tires on a car or bicycle?
110. sharpened knives or garden tools?
Have you
111. made graphs, charts or scale diagrams?
112. conducted public surveys or opinion polls?
113. had courses in bookkeeping or accounting?
114. planned the budgets for dances or plays?
115. weighed packages and computed postage?
Have you
116. experimented with making candy, cakes or salads?
117. taken more than required science courses?
118. listened to scientific talks on the radio?
119. visited museums of science and history?
120. read topics on weather forecasting?
Have you
121. worked as a salesman or saleswoman in a store?
122. sold subscriptions to magazines or newspapers?
123. participated in public speaking contests?
124. served as moderator on a panel discussion?
125. sold ads for your school annual or paper?
Have you
126. studied picture composition in photography?
127. been on decoration committees for parties?
128. done art work in clay, stone or wood?
129. designed or drawn patterns for clothes?
130. drawn plans for a piece of furniture?

Have you

- 131. read biographies of famous authors?
- 132. written script for radio programs?
- 133. recited poetry or given readings?
- 134. spent leisure time in a library?
- 135. written criticisms of novels?

Have you

- 136. studied musical composition or composed music?
- 137. written musical arrangements for an orchestra?
- 138. been a member of glee club, chorus or choir?
- 139. attended classical musical performances?
- 140. studied music beyond required courses?

Have you

- 141. helped people when they were in trouble?
- 142. helped take care of persons who were ill?
- 143. assisted elderly people to cross streets?
- 144. visited slum areas to observe conditions?
- 145. helped supervise playground activities?

Have you

- 146. performed clerical work for clubs or societies?
- 147. kept records of scores on tests and daily work?
- 148. worked as a stock clerk or inventory clerk?
- 149. kept materials neatly arranged in a desk?
- 150. sorted mail, cards, papers, fruit, etc.

Have you

- 151. gone fishing or hunting?
- 152. gone on exploring trips?
- 153. gone horseback riding?
- 154. gone on camping trips?
- 155. attended summer camps?

Have you

- 156. repaired worn electric cords?
- 157. repaired electrical switches?
- 158. worked on mechanical puzzles?
- 159. built or repaired radio sets?
- 160. used metal pounding tools?

Have you

- 161. computed mathematics problems for fun?
- 162. taken elective courses in mathematics?
- 163. read water, electric or gas meters?
- 164. tried to solve mathematical puzzles?
- 165. computed distances on a map?

Have you

- 166. looked at stars through a telescope?
- 167. dissected small animals and insects?
- 168. collected flowers, leaves, etc.
- 169. read biographies of scientists?
- 170. used laboratory equipment?

Have you

- 171. promoted sales by means of the telephone?
- 172. served on a school publicity committee?
- 173. been a leader in group activities?
- 174. sold tickets for dances or plays?
- 175. argued on controversial issues?

Have you

- 176. collected copies of famous paintings?
- 177. made your own Christmas cards?
- 178. studied landscape gardening?
- 179. used finger paint materials?
- 180. designed scenery for plays?

Have you

- 181. participated in a book club?
- 182. entered literary contests?
- 183. read collections of poems?
- 184. read collections of plays?
- 185. read historical novels?

Have you

- 186. read biographies of composers?
- 187. participated in musical contests?
- 188. criticized musical productions?
- 189. collected classical recordings?
- 190. directed an orchestra or choir?

Have you

- 191. assisted handicapped children or adults?
- 192. nursed injured animals back to health?
- 193. taught games to children or adults?
- 194. volunteered for Red Cross work?
- 195. visited friends in hospitals?

Have you

- 196. worked in a school attendance office?
- 197. kept personal or family accounts?
- 198. collected and catalogued stamps?
- 199.
- 200.

Have you

- 201. cared for wild life?
- 202. cooked out of doors?
- 203. tamed wild animals?
- 204. build camp fires?
- 205. gone on hikes?

Have you

- 206. worked in a filling station?
- 207. worked a jig-saw puzzle?
- 208. used woodworking tools?
- 209. fixed leaking faucets?
- 210. used a micrometer?

Have you

- 211. used a calculating machine?
- 212. used mathematical tables?
- 213. worked as a shipping clerk?
- 214. kept an expense account?
- 215. used a slide rule?

Have you

- 216. built radio receiving sets?
- 217. used a home chemistry set?
- 218. read scientific magazines?
- 219. belonged to science clubs?
- 220. attempted inventions?

Have you

- 221. talked on the radio or television?
- 222. organized clubs or societies?
- 223. won slogan contents?
- 224. participated in debating?
- 225. collected bills?

Have you

- 226. attended style shows?
- 227. gone to art exhibits?
- 228. studied hair styles?
- 229. collected antiques?
- 230. drawn cartoons?

Have you

- 231. read "best sellers"?
- 232. written book reviews?
- 233. written poetry?
- 234. memorized poetry?
- 235. kept a diary?

Have you

- 236. played in an orchestra or band?
- 237. taken lessons in voice?
- 238. attended concerts?
- 239. gone to operettas?
- 240. attended operas?

Have you

- 241. taught Sunday School classes?
- 242. told stories to children?
- 243. taken care of children?
- 244. read to sick persons?
- 245. trained animals?

Have you

- 246. kept and balanced books?
- 247. kept accounts or records?
- 248. worked in a library?
- 249. worked as a cashier?
- 250. kept a scrapbook?

APPENDIX C

PERCEIVED ABILITY CARD SORT SCALE

Name _____

In the process of day-to-day living individuals become involved in activities of many types and continually assess their performance in these activities. Through these experiences an individual develops an impression of his/her ability to function well or poorly, or some place between these extremes, in a wide range of activities. For purposes of this task this "impression of ability" will be referred to as "perceived ability." Do not write on the slips of paper.

Each of the ten slips of paper handed to you has a term on it which represents a category of activities (kinds of experience). Please arrange these slips of paper in order of your impression of your ability (perceived ability) with the area of highest ability being considered a rank of one (1) and the lowest ability a rank of ten (10). Write the order of your perceived abilities on the form below.

<u>Area</u>	<u>Ranking of Perceived Ability</u>
Outdoor	_____
Mechanical	_____
Computational	_____
Scientific	_____
Persuasive	_____
Artistic	_____
Literary	_____
Musical	_____
Social Service	_____
Clerical	_____

Outdoor

Farmer, Florist, Tree Surgeon, Surveyor, Nurseryman, County Extension Worker, Forrester, Telephone Lineman, etc.

Mechanical

Electrician, Carpenter, Lens Grinder, Dressmaker, Upholsterer, Cleaning and Dying Worker, Automobile Repairman, Toolmaker, etc.

Computational

Bookkeeper, Accountant, Office Machine Operator, Bank Teller, Mathematician, etc.

Scientific

Physician, Chemist, Engineer, Dental Hygienist, Meteorologist, Pharmacist, Dental Technician, etc.

Persuasive

Salesman, Personnel Manager, Buyer, Collector of Bills and Accounts, Adjustment Clerk, Lawyer, Radio Announcer, etc.

Artistic

Artist, Sculptor, Dress Designer, Architect, Hairdresser, Interior Decorator, Photographer, Window Display Worker, etc.

Literary

English Teacher, Poet, Editor, News Reporter, Librarian, Actor, etc.

Musical

Musician, Music Teacher, Music Critic, Music Store Clerk, Arranger, Dancer, Disc Jockey, etc.

Social Service

Social Worker, Teacher, Nurse, Personnel Worker, Hospital Attendant, Scout Leader, Clergyman, Counselor, etc.

Clerical

File Clerk, Statistician, Mail Clerk, Stock Clerk, Telephone Operator, Secretary, Typist, Cashier, etc.

APPENDIX D

TABLE SHOWING CHI-SQUARE VALUES OF
MANIFEST INTEREST RESPONSES
BY RACE, SEX AND CLASS

TABLE VII

CHI-SQUARE VALUES OF MANIFEST INTEREST
RESPONSES BY RACE, SEX AND CLASS

Race	Outdoor	Mechanical	Computational	Scientific	Persuasive	Artistic	Literary	Musical	Social	Clerical
3	17.80 P=.001									
4	10.69 P=.030									
7		13.61 P=.008								
10		10.28 P=.036								
12			10.29 P=.035							
20				16.08 P=.002						
52	18.61 P=.000									
53	28.49 P=.000									

TABLE VII (Continued)

Race	Outdoor	Mechanical	Computational	Scientific	Persuasive	Artistic	Literary	Musical	Social	Clerical
155	20.49 P=.000									
156		10.89 P=.027								
158		13.43 P=.009								
163			8.67 P=.06							
167				11.28 P=.023						
170				11.30 P=.023						
166				20.55 P=.00						
177						11.04 P=.026				

TABLE VII (Continued)

	Race	Outdoor	Mechanical	Computational	Scientific	Persuasive	Artistic	Literary	Musical	Social	Clerical
	195									40.83 P=.000	
	196										13.44 P=.009
	201	78.61 P=.000									
	201	22.77 P=.000									
	204	10.27 P=.036									
	226						16.13 P=.002				
	228						12.83 P=.012				
	233							11.47 P=.021			
	234							11.47 P=.021			

TABLE VII (Continued)

Sex	Outdoor	Mechanical	Computational	Scientific	Persuasive	Artistic	Literary	Musical	Social	Clerical
2	14.53 P=.005									
4	9.90 P=.042									
6		35.08 P=.00								
8		29.62 P=.00								
9		46.07 P=.000								
12			10.30 P=.035							
15			9.63 P=.047							
19				13.79 P=.008						
20				17.91 P=.001						

TABLE VII (Continued)

Sex	Outdoor	Mechanical	Computational	Scientific	Persuasive	Artistic	Literary	Musical	Social	Clerical
39				10.48 P=.033						
40				10.56 P=.031						
52	10.99 P=.026									
56		35.08 P=.00								
57		29.88 P=.00								
58		39.62 P=.00								
59		41.82 P=.00								
85							21.11 P=.00			
86								14.42 P=.006		

TABLE VII (Continued)

Sex	Outdoor	Mechanical	Computational	Scientific	Persuasive	Artistic	Literary	Musical	Social	Clerical
93									14.33 P=.006	
101	30.49 P=.000									
102	27.23 P=.000									
103	32.40 P=.000									
105	35.56 P=.000									
106		15.06 P=.004								
107		45.65 P=.000								
116			62.93 P=.00							
148										13.91 P=.007

TABLE VII (Continued)

Sex	Outdoor	Mechanical	Computational	Scientific	Persuasive	Artistic	Literary	Musical	Social	Clerical
151	14.53 P=.000									
157		97.77 P=.00								
158		41.36 P=.000								
159		61.95 P=.000								
162			78.61 P=.000							
164		61.95 P=.000								
165		40.38 P=.000								
215			13.59 P=.008							
226						35.073 P=.000				

TABLE VII (Continued)

Sex	Outdoor	Mechanical	Computational	Scientific	Persuasive	Artistic	Literary	Musical	Social	Clerical
236							12.60 P=.013			
235							47.78 P=.000			
237									35.18 P=.000	
238							13.71 P=.000			
243									60.96 P=.000	
244									22.41 P=.000	
249										15.067 P=.004

TABLE VII (Continued)

Class	Outdoor	Mechanical	Computational	Scientific	Persuasive	Artistic	Literary	Musical	Social	Clerical
205	10.27 P=.036									
206		24.42 P=.000								
208		41.88 P=.000								
209		49.48 P=.001								
210		25.25 P=.000								
214		78.61 P=.000								
183							9.66 P=.046			
185							11.30 P=.023			
192									10.95 P=0.27	

APPENDIX E

LETTER SOLICITING PERMISSION TO
UTILIZE SCHOOL CHILDREN

May 11, 1978

Dear Mr. _____:

I would like to ask for your assistance in conducting a research study at Ponca City High School. This study will involve administering a questionnaire to seniors only.

In partial fulfillment of the requirement for the Doctor of Education degree at Oklahoma State University, Stillwater, Oklahoma, the present study has been designed to investigate an individual's environmental experiences as they relate to occupational aspirations.

I solicit your assistance in this study by asking your permission to consider 50 seniors to participate in this study. It should be noted that the respondents will not be identified by name so as to preserve individual confidence.

Dr. William Ewens, Professor of Applied Behavioral Studies at Oklahoma State University, is directing my study in connection with my dissertation research. He may be contacted for verification of the study.

Please consider that I am available at your convenience to further explain the details of the study.

Sincerely,

Howard Shipp

HS:js

VITA²

Howard J. Shipp, Jr.

Candidate for the Degree of
Doctor of Education

Thesis: ENVIRONMENTAL EXPERIENCE AS RELATED TO
OCCUPATIONAL ASPIRATIONS, RACE, SEX
AND SOCIO-ECONOMIC STATUS

Major Field: Student Personnel and Guidance

Biographical:

Personal Data: Born in Muskogee, Oklahoma, October 2,
1938, the son of Howard Shipp, Sr., and Valen-
tine Shipp.

Education: Graduated from Manual Training High School,
Muskogee, Oklahoma, May, 1957; received the Bach-
elor of Science in Education degree from Langston
University, Langston, Oklahoma, in 1962, with a
major in Biology; received the Master of Teaching
degree in Education from Northeastern Oklahoma
State University, Talequah, Oklahoma, in May,
1967; completed requirements for the Doctor of
Education degree at Oklahoma State University in
July, 1978.

Professional Experience: Classroom teacher and foot-
ball coach in Muskogee, Oklahoma, for four years,
classroom teacher and football coach at Douglas
High School in Oklahoma City, four years; Assis-
tant Principal at Northeast High School in Okla-
homa City, one year; Counselor at Oklahoma State
University in the University Counseling Services,
February, 1971 to July, 1977; Acting Assistant
Director, Counseling Services, Oklahoma State
University, August, 1977 to May, 1978.

Professional Organizations: American Personnel Associ-
ation, American College Personnel Association, As-
sociation of Non-White Concern, Oklahoma College
Personnel Association.