A COMPARISON OF JOB CORPS GRADUATES AND NON-GRADUATES WITH RESPECT TO SELECTED ACADEMIC AND PSYCHOLOGICAL VARIABLES

DISSERTATION

Presented to the Graduate Council of the North Texas State University in Partial Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

By

Amrit S. Lall, B. A., M. Ed.

Denton, Texas

December, 1976

Lall, Amrit S., A Comparison of Job Corps Graduates and Non-Graduates with Respect to Selected Academic and Psychological Variables. Doctor of Philosophy (Secondary Education), December, 1976, 105 pp., 20 tables, bibliography, 53 titles.

The problem with which this investigation is concerned is that of determining the academic as well as psychological differences between the McKinney Texas Job Corps graduates and non-graduates. The purpose of the study is to gain knowledge that will be useful in the guidance of Job Corps students. Nine hypotheses were formulated to investigate the relationship between academic achievement and certain selected academic and psychological variables.

The study involved 200 underprivileged female McKinney Job Corps students who enrolled at the center from January, 1976 through March, 1976. They were divided into three groups or categories. Category I, with eighty-two students, was composed of all the students who graduated from the center. Category II students included sixty-nine subjects who terminated from the center before graduation. Category III involved forty-nine students who resigned from the Job Corps within the first thirty days after enrolling into the program.

The Reading Job Corps Screening Inventory, the Mathematics Job Corps Screening Inventory, the Mooney Problem

Check List, (MPCL), the Taylor Manifest Anxiety Scale (TMAS), and the Tennessee Self-Concept Scale (TSCS) were administered to all the students during orientation period. Personal information and behavior records were obtained from the counseling and center standards officer's files. Comparisons of the group means of the three categories of students were accomplished by a one-way analysis-of-variance design. The Scheffé F-test was used to determine which group means differed significantly when a significant F-ratio was found. The chi square test of independence was used to test one hypothesis dealing with the geographic background of the students. Pearson product-moment correlation coefficient was used to determine the test-retest reliability of the test scores. The .05 level of significance was the level at which nine hypotheses were either accepted or rejected.

There were no significant differences discovered among the three categories of Job Corps students on the academic variables of reading and mathematics. The same was true for the psychological variables of MPCL, TMAS, and TSCS. The three categories of Job Corps students differed significantly on the variable of chronological age. The graduates were significantly older (18.60 years) than the non-graduates (17.73 years). There were also significant differences among the three categories of students on the variable of negative behavior record. The graduates tended to be better

adjusted and exhibit less negative behavior than the non-graduates of the McKinney Job Corps Center.

It was concluded that significant personality differences do exist among the McKinney Job Corps graduates and non-graduates. Chronological age is a significant variable with respect to success at the Job Corps Center. Academic variables are not useful indicators of success at the Job Corps training program.

This investigation recommends that the chronological age for admission into the Job Corps program be raised from sixteen years to eighteen years of age. Tests should not be administered during the orientation period. Students should be allowed time to adjust to the new environment before they are tested.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION

During the fall of 1975, the student dropout numbers were increasing at an alarming rate at the McKinney Texas Job Corps Center. At the same time, the center failed to graduate enough students to be considered a successful training institution. The need to study the academic and personality differences between the Job Corps graduates and non-graduates was apparent.

The United States Office of Education, in its division of Student Special Services, identifies the "disadvantaged student" basically according to five general areas: (a) low income, (b) migrant background, (c) receiving welfare or vocational rehabilitation benefits, (d) students from inner city public housing, or model cities programs, (e) black students. For practical reasons, the term "disadvantaged student" is now used most to describe students who are Afro-American, Mexican-American, Puerto Rican, or American Indian. It also includes white students from families that are both poor and isolated from the middle class (6).

The McKinney Job Corps Center in McKinney, Texas provides vocational training for these disadvantaged youths, so that they may acquire vocational skills and financial independence. It is this unique purpose, the development of

rejected human resources, that makes the Job Corps such an important institution. The success of this program means conquest over poverty and ignorance, and perhaps through such programs the United States government will be able to integrate most of the poor into the working classes. Because the majority of the Job Corps students are high school drop-outs and children of welfare families who are familiar with failure and rejection, they have developed special problems that need to be studied in great detail and handled with care.

Fifty-five per cent of the McKinney Job Corps students who enter the program drop out within the first thirty days and are classified as Category III students. Ten per cent drop out within the first three months and are referred to as Category II students. Only 35 per cent of the students who start the program stay to graduate from the center and are classified as Category I students. This percentage of graduates seems to be much too low. It is important to know what causes the students to withdraw from the program, and it is necessary to offer appropriate changes or services which will facilitate the graduation of a higher percentage of students.

Job Corps celebrated its tenth anniversary early in 1975. During these eleven years of operation few studies have been done concerning the psychological characteristics of the disadvantaged youths. As a matter of fact, only a few studies have been located which deal with the psychological differences and special problems of Job Corps students.

If the student characteristics and problems are brought to light, studied, and analyzed, appropriate steps can then be taken to deal with these problems for the benefit of the Job Corps students.

Statement of the Problem

The problem of this study was to determine whether the McKinney Job Corps graduates differ from the non-graduates with respect to selected academic and psychological variables.

Purpose of the Study

The purpose of the study was to gain knowledge that would be useful in the guidance of McKinney Job Corps students. To achieve this purpose, McKinney Job Corps graduates were compared with McKinney Job Corps non-graduates with respect to the following variables:

1. Reading Job Corps Screening Inventory scores (RJSI) (see Appendix A),
2. Mathematics Job Corps Screening Inventory scores (MJSI) (see Appendix B),
3. Tennessee Self-Concept Scale (Total Positive and Self-Criticism) scores,
4. Taylor Manifest Anxiety Scale scores,
5. Mooney Problem Check List scores,
6. Chronological age,
7. Geographic background (urban or rural), and
8. Frequency of occurrence of negative behavior (misconduct).

Hypotheses

To implement the purpose of this study the following hypotheses were tested using the .05 level of significance.

1. The three groups of McKinney Job Corps students (Category I, Category II, and Category III) will differ significantly with respect to mean score on the RJSI. The mean score for Category I will be higher than the mean score for Category II and for Category III. The mean score for Category II will be higher than the mean score for Category III.

2. The three groups of Job Corps students (Category I, Category II, and Category III) will differ significantly with respect to mean score on the MJSI. The mean score for Category I will be higher than the mean score for Category II and Category III. The mean score for Category II will be higher than the mean score for Category III.

3. The three groups of Job Corps students (Category I, Category II, and Category III) will differ significantly with respect to mean number of problems indicated on ten categories of the Mooney Problem Check List. The mean number of problems for Category I will be lower than the mean number of problems for Category II and Category III. The mean number of problems for Category II will be lower than the mean number of problems for Category III.

4. The three groups of Job Corps students (Category I, Category II, and Category III) will differ significantly with respect to mean total positive scores on the Tennessee Self-Concept Scale. The mean total positive score for Category I will be higher than the mean total positive scores for

Category II and Category III. The mean total positive scores for Category II will be higher than the mean total positive score for Category III.

5. The three groups of Job Corps students (Category I, Category II, and Category III) will differ significantly with respect to mean self-criticism score on the Tennessee Self-Concept Scale. The mean self-criticism score for Category I will be higher than the mean self-criticism score for Category II and Category III. The mean self-criticism score for Category II will be higher than the mean self-criticism score for Category III.

6. The three groups of Job Corps students (Category I, Category II, and Category III) will differ significantly with respect to mean anxiety scores on the Taylor Manifest Anxiety Scale. The mean anxiety score for Category I will be lower than the mean anxiety score for Category II and Category III. The mean anxiety score for Category II will be lower than the mean anxiety score for Category III.

7. The three groups of Job Corps students (Category I, Category II, and Category III) will differ significantly with respect to mean chronological age. The mean chronological age for Category I will be higher than the mean age for Category II and Category III. The mean age for Category II will be higher than the mean age for Category III.

8. The two groups of Job Corps students (graduates, Category I, and non-graduates, Category II and Category III)

will differ significantly with respect to geographic background. A significantly greater number of graduates, Category I, than non-graduates, Category II and Category III, will have urban backgrounds rather than rural backgrounds.

9. The three categories of Job Corps students will differ significantly with respect to mean scores on the variable negative behavior. The mean score for Category I will be significantly lower than the mean score for Category II and Category III.

Background and Significance of the Study

In the winter of 1968, the American Association of Colleges for Teacher Education invited the College of Education of the University of Maine to participate in the American Association of Colleges for Teacher Education Job Corps Student Teachers Project under the leadership of Charles W. Ryan. The project was to focus on Job Corps Centers as feasible environments for providing realistic counseling experiences for counselors in training. Superficially, it was expected that the counselor trainee would meet with disadvantaged youths in need of special understanding of their unique problems.

It was discovered that traditional procedures for training counselors provided ineffective preparation for dealing with the myriad of problems that Job Corps trainees present. The major part of the counseling effort was devoted to

personal adjustment problems and developing positive self-image (9).

After the analysis of the tapes of counseling sessions it was realized that the majority of the problems stemmed from feelings of personal alienation, anxieties about finding a job, wanting a transfer to another center, homesickness, and rejection of dormitory life (9).

Ryan suggests that in the future training programs designed to upgrade disadvantaged youths, it would be essential to concentrate on a self-concept development immediately. Until disadvantaged youths have positive views of their potential, any effort to upgrade their vocational skills has little chance of success.

Numerous studies have found self-concept to be significantly related to academic achievement for the disadvantaged as well as others. Schools have a fundamental responsibility to enhance the self-concept of their students. A low self-concept has been cited as one of the major characteristics of the disadvantaged (12). Goddard (1969) believes that disadvantaged students are not used to family or neighborhood counseling suited to the type of planning they will need to meet the problems of personal identification in the institution of learning. Underprepared students need friendly, knowledgeable support from someone on campus (1).

Riessman (1968) explains why it is important to convince the disadvantaged student that he can become educated

without becoming a middle-class stereotype. Being educated does not mean losing one's own identity (10).

Morgan (1970) believes that minority students view the colleges of this country with doubting eyes, and think that colleges do not appreciate their attendance. Most minority students think that colleges look at them and their culture disparagingly, and thus have little intention of being truly relevant to the needs of the black community. In Morgan's view, the minority students insist that racist materials be eliminated--that black people be viewed positively, and that colleges cease expecting them to become models of white middle-class behavior (7).

A study of Chicano students by Lee (1971) indicated that chances of academic success are greater for those students who have positive self-images, hold favorable attitudes toward school, and are not well assimilated into the Anglo world (5).

Pruitt (1970) states that institutions desiring to help disadvantaged black students to succeed need to find ways to help them establish self-identity and develop greater self-confidence. Institutions of learning need to put fully as much emphasis on developing a supportive psychological atmosphere for black students as they do on remedying their academic deficiencies (8).

Stephen Robert Engleman, in his study of Los Angeles Job Corps Students by race, age, and religious preferences, concluded that even though there were certain cultural

differences between the Spanish speaking Job Corps students, whites, and blacks, the basic problems of the students generally were the same. Due to the fact that all the groups studied came from the same socioeconomic group--the poor, the underprivileged--they represent a group that is somehow not included in the American dream (2).

Engleman found low self-concept, lack of a specific vocational or educational goal, poor academic preparation, family problems, and a lack of motivation as the real problems these underprivileged youth at Los Angeles Job Corps Center had in common (2).

Robert L. Williams (1970), in his study of fifty-six satisfied (with school) and sixty-five dissatisfied high school students, reported that satisfied students scored significantly higher on the California Short Form Test of Mental Maturity, Reading and Math section of the California Achievement Test, Grade Point Average, Bell Adjustment Inventory, and Tennessee Self-Concept Scale (11).

Job Corps Longitudinal Manpower Evaluation Studies (1973), completed by Manpower Administration, Department of Labor, also supports the findings of Engleman. Underprivileged youth tend to lack self-confidence, have poor self-images, and because of a weak academic preparation find it difficult to compete with the rest of the nation in the labor market.

An Economic Analysis of Job Corps by the Department of Labor (1974) states that the government spends over five

thousand dollars for each Job Corps graduate that enters the labor market. The study discusses the pros and cons of the way the money is spent. After the discussion, it was agreed that five thousand dollars per graduate is really not too much money when one realizes what the government would have to spend on the same person had he or she not received a marketable skill. The government would spend a lot more to support that same person through a welfare program. In view of that thinking, Job Corps is an essential program that attempts to break the cycle of poverty by training young adults for the job market (3).

A study of relative cost benefits (1971), also conducted by the Department of Labor Manpower Program, complements the findings of the previous study and points out the relative importance of the Job Corps program (4).

Definition of Terms

The following definitions are given for the basic terms used in this study:

Category I.--Students at McKinney Job Corps Center who graduate from the center in one of the several vocations offered.

Category II.--Students at McKinney Job Corps Center who do not graduate from the center but stay on in a vocational program for more than thirty days.

Category III.--Students at McKinney Job Corps Center who do not graduate from the center and do not stay on at the center in a vocational program for more than thirty days.

Corps member.--A student at the McKinney Job Corps Center enrolled in a vocational program.

Disadvantaged student.--A poor black, white, Mexican-American, Puerto Rican, or American Indian student.

Negative behavior.--Failure to abide by center rules and regulations.

Urban.--Towns with a population of more than 15,000.

Rural.--Towns with a population of less than 15,000.

Delimitation of the Study

This study was limited to a sample of two hundred McKinney Job Corps enrollees who entered the Job Corps program between January, 1976 and March, 1976.

The academic achievement of the students was limited to the academic achievements measured by the RJSI and MJSI tests.

The psychological and personality variables of the students were limited to those variables measured by the Tennessee Self-Concept Scale (TSCS), the Taylor Manifest Anxiety Scale (TMAS), and the Mooney Problem Check List (MPCL).

The geographic background of the students was determined from the students' permanent home address.

Basic Assumptions

The following assumptions were made with respect to this study:

1. The instruments used to measure the academic achievements and the psychological variables of the students were sufficiently valid for the purpose of this study.

2. Responses to the test items represented true responses of the students.

3. The permanent home address of a Corps member was used as an indicator of geographic background; urban or rural. It is possible that some Corps members did not grow up in the geographic area indicated as a permanent home address.

CHAPTER BIBLIOGRAPHY

1. Goddard, J. M., "Opportunity for the Culturally Distinct Student," in Agony and Promise, G. Kerry Smith, San Francisco, Jossey-Bass, Inc., 1969.

2. Engleman, S. R., "An Economic Analysis of Job Corps," Institute of Industrial Relations, California University, Berkely, California, 1974.

3. Manpower Program, "The Federal Government and Manpower," Critical look at MDTA and Job Corps Program, United States Department of Labor, 1974.

4. A Job Corps Study of Relative Cost Benefits, 2 vols., Washington, D. C., Software Systems, Inc., 1971.

5. Lee, D. L. and others, "The California State Los Angeles Chicano Student," Educational Opportunity Program, California State College, Los Angeles, California, 1971, p. 87.

6. Manpower Report of the President, Transmitted to the Congress, April, 1974. United States Government Printing Office, Washington, D. C. 20402.

7. Morgan, G. D., "The Ghetto College Student," A Descriptive essay on college youth from the inner city. The American Colleges Testing Program, Iowa City, 1970.

8. Pruitt, A. S., "Black Poor at White Colleges--Personal Growth Goals," Journal of College Student Personnel, (Jan., 1970), 3-7.

9. Ryan, Charles W., "The Poland Spring Story," American Association of Colleges for Teachers Education, 1970.

10. Riessman, F., "Blue Print for Disadvantaged," B'nai B'rith, New York, Anti-Defamation League, 1968.

11. Williams, Robert L., "Personality, Ability, and Achievement Correlates of Scholastic Attitudes," Journal of Educational Research, 83 (May, 1970), 401-403.

12. Zirkel, P. A., "Self-Concept and the Disadvantaged of Ethnic Group Membership and Mixture," Review of Educational Research, 41 (Jan., 1971), 211-225.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

The review of the related literature will be presented under the following titles: (a) studies related to Job Corps, (b) studies related to self-concept, (c) studies related to anxiety, and (d) related studies.

Job Corps

The United States Department of Labor, Manpower Administration, in a statistical analysis of Job Corps student population, reported the following descriptive data for Job Corps students in the year 1975.

a. Sixty per cent were black and approximately 11 per cent Spanish speaking.
b. Seventy-three per cent were young men between the ages of sixteen and twenty-one.
c. Twenty-seven per cent were young women between the ages of sixteen and twenty-one.
d. Eighty per cent were from urban areas.
e. Sixty-nine per cent, upon entry into Job Corps, scored below sixth grade reading level.
f. Eighty-nine per centwere school dropouts.
g. Sixty-three per cent were from the families of five or more persons.

h. Eighty-one per cent were from families whose annual income was $4,999 or less (21).

The American Institute for Research evaluated the Job Corps center program on the attitude and behavior of forty to fifty corps members who attended basic education classes and received on-the-job vocational training. Information was gathered from work supervisors, counselors, instructors, teachers, and corps members, regarding behavioral and attitudinal changes and the general effectiveness of each aspect of the center's program over a two-month period.

The reading ability of the corps members advanced 1.6 grade levels during this period. Most work supervisors reported excellent work attitudes and habits and improvement in the work skills. The experience of learning at the capital center had a beneficial motivational effect on the student population (15).

The American Association of Colleges for Teacher Education invited the University of Maine's College of Education to participate in the Job Corps student teachers project under the leadership of Charles W. Ryan. The project was designed to focus on Job Corps centers as feasible environment for providing realistic counseling experiences for counselors in training.

It was discovered that traditional procedures for training counselors provided ineffective preparation for dealing with the problem of Job Corps students whose major problems

seemed to be personal adjustment problems and the problem of developing positive self-images. The majority of the problems of Job Corps students stemmed from feelings of personal alienation, anxieties about finding a job, wanting to transfer to another center, homesickness, and rejection of dormitory life (37).

Ryan (37) suggests that in future training programs to upgrade disadvantaged youths, it would be essential to concentrate on positive self-concept development. Until disadvantaged youths develop a positive view of their potential, any effort to upgrade their vocational skill will have little chance for success.

Stephen Robert Engleman (10), in his study of Los Angeles Job Corps students by race, age, and religious preference, concluded that even certain cultural differences between Spanish speaking Job Corps students, whites, and blacks existed, the basic problems of the students were the same, due to the fact that all groups studied came from the same lower socioeconomic group. Engleman found low self-concept, lack of specific vocational or educational goals, poor academic preparation, family problems, and a lack of motivation as the real problems of the Los Angeles Job Corps students.

Job Corps Longitudinal Manpower Evaluation Studies, conducted by the Department of Labor Manpower Administration (4), also support the findings of Engleman (10) and Ryan (37).

Underprivileged youth tend to lack self-confidence, have a poor self-image, and because of weak academic preparation find it difficult to compete with the rest of the nation in the labor market.

Numerous studies have found self-concept to be significantly related to academic achievement for disadvantaged students as well as others. Zirkel suggests that schools have a fundamental responsibility to enhance the self-concept of their students. A low self-concept has been cited as one of the major characteristics of the disadvantaged and culturally deprived (43).

Self-Concept

American psychologist, William James considered self-concept to be very important in understanding human behavior. During the mid-thirties as Gestalt psychology began to come into vogue in the United States, the self came to be considered crucial in understanding human behavior. Under the leadership of men like Carl Rogers, Donald Snygg, Arthur Combs and Abraham Maslow, the Gestalt-Field Theory has matured into a theory known as phemomenology. In this theory, the central variable in behavior as well as in education and learning is the self. To understand the behavior of a person one must understand how that person sees himself. Lecky sees all human behavior as organized into a single system, the nucleus of which is the individual's

evaluation of himself. An individual cannot behave independently of the way he thinks about himself (22).

According to Bartocci, "the self is a dynamic unity of the activities of sensing, remembering, imagining, perceiving, wanting, feeling, and thinking" (1). Dai (7) believes that the self-concept forms the core around which all other facets of personality are organized. Hawk argues that both the process of psychotherapy and educational process try to reconstruct the self.

> The importance of the self-concept in human behavior is probably demonstrated most adequately in psychotherapy. Rogers has found that psychotherapy deals primarily with the organization and functioning of the self. According to Rogers, the process of therapy is to be explained with reference to a reconstruction of the self. Although education is not and should not be perceived as psychotherapy, the educational process, by its very nature, affects a reconstruction of the self-concept of children. Therapy is successful to the extent that the end result is a worthy, valuable, and realistic self-concept. Education has failed, regardless of the amount of knowledge imparted, when selves of pupils are inadequate, defensive, and characterized by a general feeling of incompetence in what matters to them (17).

The conception of the self described here by Hawk indicates that the self-concept is learned through a slow process of interacting with the environment. The self emerges because of learning experiences with other human beings and their values and attitudes.

Combs describes the individual who has a positive self-concept as one who expects to be successful, who behaves courageously, is less disturbed about criticism,

is free to pay more attention to events outside the self, behaves unselfishly, does not have to be concerned about whether he is conforming. In short, a positive view of the self permits openness and freedom (5).

A study of Chicano students by Lee (23) indicated that chances of academic success are greater for those students who have positive self-images, hold favorable attitudes toward school, and are well assimilated into the Anglo world.

Berry studied the self-concept differences between the inner city high school students and dropouts in California. He found significant differences between the two groups on the variable of self-concept. Dropouts had lower scores than the regular high school students on the variables related to self-esteem and self-concept (2).

Paussaint and Atkinson (33) suggest that society fosters a negative self-image among Negroes, impedes self-assertion and aggressiveness and fails to develop educational aspirations in the schools. They recommend major structural changes in American society to remedy this situation.

Healey and DeBlassie (18) administered the Tennessee Self-Concept Scale to 425 Anglo, 40 Negro, and 142 Spanish-American adolescents. They found that Spanish-American and Negro adolescents had significantly lower self-criticism scores than the Anglo subjects. Spanish-American subjects also scored highest on moral-ethical scales. Anglo subjects

were in the middle. Negro subjects scored the lowest on moral-ethical scales. Total positive scores on TSCS did not differ significantly among the three ethnic groups, nor were they affected by the sex differences.

Musa and Roach (29) studied the problem that self-evaluation of personal appearance is related to total self-concept of the individual. One-hundred and nineteen male and thirty-five female seventeen to eighteen year olds from lower-class families were administered the TSCS. A statistically significant relationship was found only among female subjects.

Gilham (14) explains how reading can influence the self-concept of the student. She took twenty eighth-grade students with reading problems and poor self-concepts and asked them to read a paragraph to elementary school students once a week for one semester. Post-tests indicated that the subjects' self-concepts had improved along with the reading proficiency.

Pruitt (34) states that institutions desiring to help disadvantaged black students to succeed need to find ways to help them establish self identity and develop greater self-confidence. Institutions of learning need to put fully as much emphasis on developing a supportive psychological atmosphere for black students as they do on remedying their academic deficiencies. Goddard believes that disadvantaged students are not used to family or neighborhood counseling suited to the type of planning they will need to meet the

problems of personal identification in the institution of learning. Underprepared students need friendly, knowledgable support from someone on campus.

Page (32) concluded that pupil performance improved to a statistically significant degree when teachers wrote encouraging comments on pupil's papers and homework. A control group which did not receive the encouragement and positive remarks lost ground in performance during the same period.

Riessman (36) explains why it is important to convince the disadvantaged student that he can become educated without becoming a middle-class stereotype. Being educated does not mean losing your own identity.

Morgan (28) believes that minority students view the colleges of this country with doubting eyes, and think that colleges do not appreciate their attendance. Most minority students think that colleges look at them and their culture disparagingly, and thus have little intention of being truly relevant to the needs of the black community. In Morgan's view, the minority students insist that racist materials be eliminated--that black people be viewed positively, and that colleges cease expecting them to become models of white middle-class behavior.

Krugman (20) reports an experimental program in the New York City school system. The self-concepts of underprivileged students were changed by giving the students a

feeling that the school cared for them and by arranging school tasks at such a level of difficulty that the students enjoyed success experiences rather than accustomed failure. In this situation the students' self-concepts changed for better and they made better personal and social adjustment. The achievement level improved also.

Davidson and Lang (8) investigated the relationship between children's perceptions of their teachers' feelings toward them and their own self-perception. A check list of objectives was administered under two conditions: my teacher thinks I am and I think I am. A high positive relation of .82 was found between the children's perception of their teachers' feelings toward them and the children's perception of themselves. The findings suggest that the students are aware of the way the teachers feel toward them and that they see themselves in the same way their teachers see them. If a teacher wants the student to feel positive about himself, the teacher should feel positive about him (8).

Korman (19) demonstrated that individuals with high self-esteem choose occupations which require a high level of ability and individuals with a low self-esteem will choose vocations that require less ability.

Self-esteem is an aspect of the self-concept, and self-concept influences the nature and progress of the individual through developmental tasks. Positive or negative self-esteem could reflect the rate of progress through vocational

developmental tasks during the adolescent period. To test this statement, Resmick, Fauble and Osipow (35) conducted a study. The subjects were 114 male and 102 female college students in an introductory psychology class. Forty-eight of the male students were freshmen, twenty-nine were sophomore, twenty were juniors, fifteen were seniors, and two were graduate students. The female subjects consisted of seventy-two freshmen, twenty-seven sophomores, two juniors, and one senior. The subjects were administered the Tennessee Self-Concept Scale and a Biographical Inventory Questionnaire. It was predicted that the subjects with high total positive scores on the TSCS would express greater certainty about their career plans than those with low scores.

The findings indicated that the high self-esteem males expressed greater certainty about their career choices than the male students with low self-esteem. The same was true for the female subjects. Students with high self-esteem expressed greater certainty about their career choice. Female students with low self-esteem expressed less certainty about their career choice (35).

Thornburg studied a total of 265 Chicano, American Indian, Anglo, and black high school students who were identified by school officials as potential dropouts. Subjects were placed in either a vocational program, special academic program, or regular academic program. The special academic program attempted to increase subjects' self-concept

and attitude toward school through the use of positive reinforcement techniques. Comparison of scores on TSCS at the beginning and end of the school years indicates that the special academic students made significant gains in attitudes toward self and school. The special academic program also had the lowest dropout and absenteeism rate (40).

Anxiety

Early in his career Freud (12) regarded anxiety as purely physiological in nature. Later on he defined anxiety as a signal of danger, which appears when the organism is overwhelmed with excitation. This signal warns the organism in advance of coming danger and allows it to take some form of protective reaction. Freud believed that anxiety developed during the birth as a result of birth trauma.

In recent years considerable laboratory research has shown that anxiety can be regarded from the viewpoint of the learning theory. Thus, behaviorists Estes and Skinner state that "anxiety results when a neutral stimulus is followed by a primary aversive stimulus" (11). When this process is repeated the neutral stimulus takes on the function of a conditioned aversive stimulus. The observable behavior from this process is called anxiety. The examples of this operation are observed frequently in a school setting. The anticipation of an examination can bring about anxiety

symptoms in a student who is worried about his performance on that examination.

Sarason (38) has been able to differentiate between general and test anxiety. He states that test anxiety is a learned drive that is situationally evoked while general anxiety is not specific and represents an unconscious conflict.

Doyle and Friedman (9) describe the classroom behavior of a child with excessive anxiety. The behavior can be characterized by hyperactivity, short attention span, and a high level of distractability that is not appropriate for the age of the child. Doyle and Friedman caution diagnosticians that the same symptoms of high anxiety can also be mistakenly diagnosed as the symptoms of hyperkinetic impulse disorders. Psychological testing revealed that moderate amounts of anxiety tend to maximize school achievement while high levels of anxiety interfere with learning.

Frost (13) studied the relationship between anxiety and educational achievement among 310 high school students in England. He concluded that complex interrelationships emerged between the type of anxiety and type of achievement and the sex of the subjects. Students with high anxiety underachieved more than students with low anxiety levels.

Cuppen's (6) findings from the Netherlands indicate that the overachievers were more highly motivated and less anxious than the underachievers, and that the parents of

the overachieving subjects started later with the independence training of the children than the parents of the underachievers.

Sinha (39) studied the relationship between manifest anxiety and scholastic achievement. He administered the Taylor Manifest Anxiety Scale (Hindi Translation) to 200 high achieving and 200 low achieving tenth-grade and eleventh-grade high school students. Sinha discovered that anxiety scores were significantly and negatively related to academic achievement, and that high and low achievers could be significantly differentiated on the basis of manifest anxiety scores. It was concluded that manifest anxiety symptoms have a debilitating effect upon scholastic achievement.

Related Studies

Williams (42), in his study of students satisfied and dissatified with school, concluded that students who are dissatisfied with school obtain significantly lower scores on all ability, achievement, and personality variables than students who are satisfied with school.

Tseng (41) tried to predict school achievement among minority group students through locus of control. Correlates of the locus of control were judged to be subject's compliance with the rules: observance of safety practices, care of equipment, ability to work with others, work tolerance, manners in shop, and training satisfaction. He hypothesized

that locus of control as a variable would be a significant correlate of job proficiency, employability, and training satisfaction and that the subjects with internal locus of control should show (a) higher instructors' ratings on job proficiency and personal quality, (b) higher instructors' ratings on employability, (c) higher self ratings on training satisfaction, (d) higher self ratings of training success, (e) higher self ratings on employability, (f) higher need for achievement, and (g) lower fear or anxiety of failure (41).

The subjects of Tseng's study were ninety-five male and forty-five female students who enrolled in a vocational training program at a state vocational rehabilitation center. They received their training in office occupations, auto mechanics, culinary arts, nursing assistance, television, radio, watch repair, and maintance specialization. The findings of this study indicate that subjects' compliance with rules, observance of safety practices, operation and care of equipment, ability to work with others, work tolerance mannerism in shop, abstract thinking, the tendency to be conscientious, and the level of training satisfaction are significantly and negatively associated with external and positively correlated with internal locus of control (41).

Brittain (3) made a comparison of rural and urban high school girls with respect to peer vs. parental compliance. His findings did not show the expected differences between the two groups. Rural students were not significantly more

subject to parental pressures. Just as urban students were not significantly more susceptible to peer suggestions.

Lohnes and Gary (25) in their study dealing with reading, mental ability, and achievement found that reading ability measurements were overwhelmingly saturated with general intelligence and achievement traits.

In another study, Lohnes and Gary (26) did a correlation analysis of the relationship between reading achievement and intellectual development. They concluded that "intelligence is the most noteworthy mental trait a child is developing during school years. Most educators have reason to believe that reading instruction makes the largest and most crucial contribution toward general educational development" (26, p. 61).

Newman (31) in her follow-up study of first-grade underachievers in reading, found that the 230 subjects tested were still underachievers, especially in reading until they reached the sixth grade. She concluded that reading ability is a good prediction of underachievement or overachievement.

Lloyd (24) studied the relationship between reading achievement and its relation to academic proficiency. Among the high school population she discovered that underachievers in reading as a group were significantly lower in performance than average or underachievers in other scholastic areas. Also, underachievers in reading had the highest attrition rate.

Neufeld (30) investigated the difference between high and low mathematic achievement and personality characteristics. He found that high mathematic achievement was related to high achievement in school, better self-concept, positive social behavior and standards, and good community relations.

Mangieri (27) tested the relationships between reading ability, self-concept, and academic achievement. His results indicated that subjects who were reading above grade level had a better self-concept and higher academic achievement.

Summary

Various studies pertaining to Job Corps indicate that the Job Corps students come from the lowest socioeconomic class. Most of the students belong to the minority groups and usually are high school dropouts who come to Job Corps to attain a high school diploma and receive some type of vocational skill training, so that when they graduate from Job Corps they can secure employment. Job Corps is a Federally funded, residential program for adolescents between the ages of sixteen and twenty-one, operated by the Department of Labor, Manpower Administration. Students do not pay to receive an education at Job Corps centers.

The review of the literature makes it clear that Job Corps students hold a very poor image of themselves. Their personality-related problems may stem from the fact that they have poor self-concepts which cause corps members to do

poorly academically and socially. Several important suggestions have been made to help develop a positive self-concept of underprivileged youth.

Excessive anxiety has been proven to be the major cause of poor performance, even though small amounts of anxiety improve performance. It seems possible to predict performance from the anxiety levels of the subjects.

Reading ability has been found to be positively related to academic achievement and positive self-concept in numerous studies. Mathematic ability showed a positive relationship toward academic achievement. However, no research was found that revealed a relationship between the personality characteristics of Job Corps students and academic or vocational success.

CHAPTER BIBLIOGRAPHY

1. Bartocci, P. A., "The Psychological Self, the Ego, and Personality," in D. E. Hammacheck (editor), The Self in Growth, Teaching and Learning, Englewood Cliffs, Prentice-Hall, Inc., 1965, pp. 14-26.

2. Berry, Gordon L., "Self Concept and Need Factors of Inner-City High School Adolescent and Dropouts," Child Study Journal, 4 (1974), 21-31.

3. Brittain, Clay V., "A Comparison of Rural and Urban Adolescents with Respect to Peer vs. Parental Compliance," Adolescence, 4 (1969), 59-68.

4. "Characteristics of Urban Enrolees Entering Job Corps," Longitudinal Manpower Evaluation Studies, United States Department of Labor, Manpower Administration, U. S. Government Printing Office, 1973.

5. Combs, A. W., editor, Perceiving, Behaving, Becoming, Washington, Association for Supervision and Curriculum Development, 1962.

6. Cuppen, I. W., "Intelligence, Motivation, and Anxiety, or Determinants of School Achievement in Secondary Education," University of Nigmegen, Netherland.

7. Dai, B., "Some Problems of Personality Development Among Negro Children," in C. Kluckhohn and H. A. Murray, editors, Personality in Nature, Society and Culture, New York, Alfred A. Knopf, 1954.

8. Davidson, H. H. and G. Lang, "Children's Perceptions of Their Teacher's Feelings Toward Them Related to Self-Perception, School Achievement, and Behavior," Journal of Experimental Education, 129 (1960), 107-118.

9. Doyle, G. T. and R. J. Friedman, "Anxiety in Children: Some Observations for the School Psychologist," Psychology in the Schools, 11 (April, 1974), 161-164.

10. Engleman, S. R., "An Economic Analysis of Job Corps Race and Age Groups, Race and Religious Groups," Observations of Industrial Relations, Berkeley, California, California University Press, 1974.

11. Estes, W. K. and B. F. Skinner, "Some Quantitative Properties of Anxiety," Journal of Experimental Psychology, 29 (1941), 390-400.

12. Freud, Sigmond, The Problem of Anxiety, New York, Horton, 1936.

13. Frost, Barry P., "Anxiety and Educational Achievement," British Journal of Educational Psychology, 38 (1968), 293-301.

14. Gillham, Isabel, "Self-Concept and Reading," Reading Teacher, 21 (1967), 270-273.

15. Gloege, William P., Evaluation of Project "44," The Job Corps Capital Center, American Institute for Research Report No. R66-13, p. 37.

16. Goddard, J. M., "Opportunity for the Culturally Distinct Student," in Agoney and Promise, G. Kerry Smigh, San Francisco, Jossy Brothers, Inc., 1969.

17. Hawk, J., "Self Concepts of the Socially Disadvantaged," Elementary School Journal, 67 (Jan., 1967), 196-206.

18. Healey, Gary W. and Richard R. DeBlassie, "A Comparison of Negro, Anglo, and Spanish-American Adolescents' Self-Concept," Adolescence, 9 (Spring, 1974), 15-24.

19. Korman, A. K., "Self-Esteem as a Moderator of the Relationship between Self-Perceived Abilities and Vocational Choice," Journal of Applied Psychology, 51 (1967), 65-67.

20. Krugman, M., "The Culturally Deprived Child in School," National Education Association Journal, 50 (April, 1961), 22-23.

21. "Leaving the Future Open--Job Corps The First Decade," United States Department of Labor, Manpower Administration, U. S. Government Printing Office, 1974.

22. Lecky, P. Self-Consistency, New York, Island Press, 1951.

23. Lee, D. L. et al., The California State Los Angeles Chicano Students, Educational Opportunity Program, California State College, Los Angeles, California, 1971.

24. Lloyd, Dee Norman, "Reading Achievement and Its Relation to Academic Performance, Part I, Reading Differences in Elementary School--Relationship to Secondary School Performance," unpublished doctoral dissertation, National Institute of Health, Bethesda, Md., March, 1969.

25. Lohnes, Paul R. and Marian Gary, "Intellectual Development and the Cooperative Reading Studies," Reading Research Quarterly, 8 (February, 1972), 52-61.

26. _____, "Intelligence and Cooperative Reading Studies," Reading Research Quarterly, 7 (September, 1972), 466-476.

27. Mangieri, John N. and Henry D. Olsen, "The Effect of Reading Ability on Self-Concept of Academic Ability of College Students," Paper presented at the meeting of the American Educational Research Association, Washington, D. C., March 30-April 3, 1975.

28. Morgan, G. D., "The Ghetto College Student: A Descriptive Essay on College Youth from the Inner-City," American College Testing Program, Iowa City, 1970.

29. Musa, Kathleen F. and Mary E. Roach,"Adolescent Appearance and Self-Concept," Adolescence, 8 (Fall, 1973), 385-394.

30. Neufeld, Allen K., "Differences in Personality--Characteristics between Groups Being High and Low Math Achievement Gain Under Individualized Instruction," unpublished doctoral dissertation, Department of Education, Wisconsin University, Madison, 1967.

31. Newman, Annabel, "Later Achievement Study of Pupils Underachieving in Reading in the First Grade," Reading Research Quarterly, 7 (Sept., 1972), 477-508.

32. Page, E. B. "Teacher Comments and Student Performance, A Seventy-Four Classroom Experiment in School Motivation," Journal of Educational Psychology, 49 (August, 1958), 173-181.

33. Paussaint, Alvin F. and Carolyn D. Atkinson, "Negro Youth and Psychological Motivation," Journal of Negro Education, 37 (Summer, 1968), 241-251.

34. Pruitt, A. S., "Black Poor at White Colleges--Personal Growth Goals," The Journal of College Student Personnel, (January, 1970), 3-7.

35. Resnick, Harvey, M. L. Fauble, and Samuel Osipow, "Vocational Crystalization and Self-Esteem in College Students," Journal of Counseling Psychology, 17 (1970), 465-467.

36. Riessman, F., "Blue Print for Disadvantaged, B'nai B'rith, New York, Anti-Defamation League, 1968.

37. Ryan, Charles W., The Portland Spring Story, American Association of Colleges for Teacher Education, 1970.

38. Sarason, et al., Anxiety in Elementary School Children, New York, John Wiley, 1960.

39. Sinha, N. C., "A Study of Relationship Between Manifest Anxiety and Scholastic Achievement," Journal of the Indian Academy of Applied Psychology, 9 (1972), 65-67.

40. Thomburg, Hershel D., "An Investigation of a Dropout Program Among Arizona's Minority Youth," Education, 94 (February, 1974), 249-265.

41. Tseng, M. S., "Locus of Control as a Determinant of Job Proficiency, Employability, and Training Satisfaction of Vocational Rehabilitation Clients," Journal of Counseling Psychology, 17 (1970), 487-491.

42. Williams, Robert L., "Personality, Ability, and Achievement Correlates of Scholastic Attitudes," Journal of Educational Research, 63 (May/June, 1970), 401-403.

43. Ziekel, P. A., "Self-Concept and the Disadvantaged of Ethnic Group Membership and Mixture," Review of Educational Research, 41 (Jan., 1971), 211-225.

CHAPTER III

PROCEDURES OF THE STUDY

This chapter presents in detail the procedures used in the completion of this study. The procedures included involve the subject selection, the instruments employed in the study, the collection of data and the statistical treatment employed in the analysis of the data.

Subjects

Each new enrollee who entered the McKinney Job Corps Center from January 7, 1976 through March 3, 1976, was administered, on a voluntary basis (see Appendix), the Reading Job Corps Screening Inventory, Mathematics Job Corps Screening Inventory, Tennessee Self-Concept Scale, Taylor Manifest Anxiety Scale and Mooney Problem Check List, during the first week of enrollment (orientation week) at the center. Thus, the first 200 students who took these tests were selected as the subjects for this study.

In an initial interview with the counselors, personal data about each subject's background was collected. The 200 subjects ranged in age from sixteen to twenty-one years of age, with a median age of seventeen years. All of the subjects were females from lower socioeconomic classes and belonged to a minority group of either black, Chicano,

Indian, Puerto Rican, or underprivileged white. Most of the subjects were high school dropouts whose median school grade completed was grade ten. Most of the subjects came from broken homes or homes in which the mother was the head of the family. The subjects represented most of the states of the United States of America.

The three categories or groups of students were the following:

1. The students who left the McKinney Job Corps Center within thirty days after entering the program and were classified as the Category III group.
2. The students who dropped out of the program and left the McKinney Job Corps Center before graduation but stayed in the program more than thirty days and were classified as the Category II group.
3. The students who completed the program and graduated from the McKinney Job Corps Center and were classified as Category I group.

The number and percentage of subjects in the three categories are presented in Table I. The frequencies and percentages in Table I indicate the breakdown of the 200 subjects into the three groups. Eighty-two subjects were classified as graduates or Category I. Sixty-nine subjects were classified as Category II, the non-graduates or dropouts before graduation, and 49 were classified as Category III,

subjects who dropped out of the Job Corps less than one month after they enrolled in the program.

TABLE I

NUMBERS AND PER CENTS OF SUBJECTS IN THE THREE CATEGORIES OF JOB CORPS SUBJECTS

Group Categories	Number of Subjects	Per Cent of Total Group
Category I	82	41.0
Category II	69	34.5
Category III	49	24.5
Total	200	100.0

Instruments Used in the Study

The Tennessee Self-Concept Scale was chosen as the instrument to provide a measure of the students' self-concept. A wide variety of complicated instruments have been employed to measure the self-concept of an individual in recent years, but there still is need for a scale which is simple, widely applicable, well-standardized and multi-dimensional in its description of the self-concept. The Tennessee Self-Concept Scale meets this need. This scale was developed in 1955 by William H. Fitts for the use of the Tennessee Department of Mental Health. The original purpose of the scale was to help the Tennessee Department of Mental

Health research efforts. The instrument has since proved useful for many other purposes (1).

The TSCS consists of 100 self-descriptive statements which the subject uses to portray a picture of himself. He indicates the statement to be (a) completely false, (b) mostly false, (c) partly false, (d) mostly true, or (e) completely true. The scale is self-administrating for either individuals or groups. It is applicable to the whole range of the mental health spectrum from the psychologically healthy, well-adjusted individual to the psychotic and mentally ill individual (1).

A validity study by Fitts indicated that the difference between psychiatric and non-pyschiatric subjects were significant at the .001 level on most of the scores utilized on the Tennessee Self-Concept Scale. Fitts also reported the test-retest reliability coefficient of .75 for self-criticism scores, and .92 for total positive scores.

The scores obtained from the Tennessee Self-Concept Scale will be utilized for the purpose of this study. These scores are as follows:

1. The Self-Criticism Score: There are ten items in the TSCS that measure this score. These are all mildly derogatory statements that most people admit as being true for them. Individuals who deny most of these statements are often being defensive and are making a deliberate effort to present a favorable picture of themselves. High self-criticism

scores usually indicate a normal, healthy openness and a capacity for self-criticism and criticism by others.

2. Total Positive Scores: This is the most important single score because it reflects the overall level of self esteem that the subject has toward himself. Persons with high scores tend to like themselves, but they are individuals of value and worth. They have confidence in themselves and they act accordingly. On the other hand, people with low scores are doubtful about their own worth and see themselves as undesirables. They often feel anxious, depressed and unhappy, and display little faith or confidence in themselves and act accordingly.

The Mooney Problem Check List was selected to discover the basic problems that were of concern to Job Corps students. These lists that comprise the instrument were developed during the early 1940's to help students express their personal problems. The college form which is used in this study was published in 1950.

The procedure for administering the check list is simple. The student reads through the check list, underlines the problems which are of concern to him, circles the ones of most concern, and writes a summary in his own words.

Ross L. Mooney describes the function of the problem check list in the manual designed to accompany the revised college form. He states, "The function of the problem check list is to help students in the expression of their personal problems" (4, p. 3).

The instruments present a list of 330 items which were chosen from a master list of 5,000 problems common to college students. The selection and phrasing of the items (problems) used in the list were based upon the following criteria:

The items should be:

In the language of the student.

Short enough for rapid reading.

Self-sufficient as individual phrases.

Consistent in style of expression.

Common enough to appear frequently over large groups of students or serious enough to be important in any one case.

Graduated in seriousness from minor difficulties to major casualties.

Vague enough in "touchy" spots to enable the student to check but still feel he could hide his problem in later conferences if he chose to do so.

Centered within the student's own personal experience and feelings, rather than on his general social concern.

Balanced among problems which seem to originate primarily within self, in the surrounding environment, in other people, and in intellectualized ideas (4).

The problems are presented in eleven general problem categories, thirty problems to each category. The thirty problems in each category are arranged horizontally across the three inner pages of the check list forms. The individual filling out the problem check list checks the items from

top to bottom. This way, the student is unaware of any groupings of items.

The eleven problem areas into which the items are grouped are as follows:

Area 1. Health and physical development (HPD)

Area 2. Finance--Living Conditions and Employment (FLE)

Area 3. Social and Recreational Activities (SRA)

Area 4. Social--Psychological Relation (SPR)

Area 5. Personal Psychological Relation (PPR)

Area 6. Courtship, Sex, and Marriage (CSM)

Area 7. Home and Family (HF)

Area 8. Morals and Religion (MR)

Area 9. Adjustment to College Work (ACW)

Area 10. The Future (FUE)

Area 11. Curriculum and Teaching Procedure (CTP).

Area 11, Curriculum and Teaching Procedure (CTP) of the Mooney Problems Check List, was not used. It was considered not to be applicable to the problems of new enrollees who were not familiar with the teaching methods and procedures at the Job Corps Center. Both underlined and circled responses were used for the total count score for MPCL. The underlined responses were the ones students indicated as not being very serious problems. The circled responses were the ones indicated as serious problems.

The author cautions the user against certain misconceptions. The check list is not a test--it has no set of scores

with an automatic meaning in terms of one criteria. The number of problems underlined and circled are merely "counts" of problems and are not scores (4).

The reliability of the MPCL is determined by the true studies dealing with group reliability. The first study by Gordon revealed a .93 correlation between administrations of the check list to 116 college students. The second study was based upon educational groups in which the MPCL was repeated with a one- to ten-week gap between the test administrations. The rank-order correlations in this study varied from .90 to .98 (4).

The Taylor Manifest Anxiety Scale was chosen as an instrument to measure anxiety levels of the Job Corps students. This anxiety scale was originally constructed by Janet A. Taylor in 1951 for use in a study of eyelid conditioning. She submitted approximately 200 items from the Minnesota Multiphasic Personality Inventory (MMPI) to five separate psychologists along with the definition of manifest anxiety that followed Cameroris' description of chronic anxiety reactions. The psychologists were asked to select the items that indicated manifest anxiety according to Cameroris' definition. Sixty-five items were selected for the anxiety scale because on these items the judges agreed 80 per cent of the time (5).

After the initial testing of 352 introductory psychology students the scale was modified. At present it consists of

fifty true-false items that showed a high correlation with the total anxiety scores of the group tested.

In order to determine the consistency of the anxiety scores over a period of time, groups of individuals have been retested on the scale at various time intervals. In one instance the results of retesting fifty-nine students in introductory psychology after a three week time yielded a Pearson product-moment correlation coefficient of .89.

In another test-retest study, the TMAS was administered to 163 students in an advanced undergraduate psychology course who had previously taken the test as introductory psychology students. The test-retest coefficient was found to be .82 for the students who were retested after five months, and .81 for the ones who were retested after nine to seventeen months (5).

The Job Corps Mathematics Skills Inventory was chosen as an instrument to measure the mathematical knowledge of the subjects for this study. The Job Corps Mathematics Skills Inventory (MJSI) was developed by the Department of Labor, Manpower Administration, Office of Program Development, Washington, D. C. for the exclusive purpose of screening Job Corps students' mathematical ability at the time the student enters the Job Corps Program. It is a very crude instrument at best, which has to be followed by other diagnostic tests to really assess the true knowledge of a student in mathematics. The test MJSI was developed in

1967 and has been used in Job Corps ever since (2). The Department of Labor, Manpower Administration, Office of Program Development was asked to provide the information about the MJSI test reliability and validity. The reply was that the old files were destroyed and there is no information available on the test.

The Job Corps Mathematics Skills Inventory (MJSI) test scores are used to place new students in the Job Corps mathematics program. This mathematics program is designed to provide sixth-grade math education for those students who successfully complete the program. Students can learn to add, subtract, multiply, and divide whole numbers, fractions, and decimals. It is possible for a youth who can only count to ten to enter the program and succeed. Once the student is placed in the program he can progress through the sequence of lessons at a speed that suits his individual needs and temperament.

The equivalent high school grades as they relate to the MJSI score are as shown in Table II.

TABLE II

THE EQUIVALENT HIGH SCHOOL GRADES AS THEY RELATE TO THE MJSI SCORE

Mathematics Skill	MJSI Score	High School Grade
Whole Numbers	0-60	4
Fractions and Measurements	61-84	5
Decimals and Percentages	85-96	6
Advanced Mathematics	97-100	7-8

The MJSI is a twenty-five minute test that has five equivalent forms--A., B., C., D., and E. Each item in the right column (page 1) is worth five points. Each item in the middle column (page 2) is worth three points, and each item in the left column (page 3) is worth two points. The total score is reached by counting the number of items correct in each column and multiplying that number by the number of points per item for that column. By summing up the scores from each of the three columns one reaches the total score. One hundred points is the highest possible score (2).

The Job Corps Reading Skills Inventory (RJSI) was chosen as an instrument to measure the reading proficiency of the Job Corps students who were used as subjects for this study. The RJSI was developed by the Department of Labor, Manpower Administration, Office of Program Development, Washington, D. C., for the purpose of screening Job Corps students for the Job Corps reading program.

The Job Corps Reading Skills Inventory (RJSI) program manual describes the purpose of administering RJSI to its students as such. "The object of the test is to allow each corps member to enter the Job Corps Reading program at a level appropriate to her reading proficiency at the time of her entry into Job Corps" (3, p. 3).

The Job Corps Reading Skills Inventory (RJSI) is a short, twenty-five item, thirteen minute timed reading test

employed by Job Corps specifically for the placement purposes into the Job Corps reading program. The test items were selected from the Stanford Achievement Tests. The most relevant twenty-five items were used to form RJSI for placement use for Job Corps reading programs. The test indicates whether a corps member is able to read at all, is a beginning reader, or reads at an intermediate or advanced level. RJSI is a completion and multiple choice type reading test. The highest score possible on the test is twenty-five.

The equivalent high school grades as they relate to the RJSI are shown in Table III.

TABLE III

THE EQUIVALENT HIGH SCHOOL GRADES AS THEY RELATE TO THE RJSI

RJSI Scores	Grade Equivalent
0-4	1
5-6	2
7-8	3
9-12	4
13-16	5
17-18	6
19-20	7
21-25	8-10

RJSI is a crude instrument at best. It has to be followed by other diagnostic reading tests to obtain the true reading

proficiency of a student. But it does help indicate at which level a student is capable of reading.

The Department of Labor, Manpower Administration, Office of Program Development was contacted for information concerning the RJSI test validity and reliability, but the reply was that the old files were destroyed and that no such information is available.

Procedure for Collecting Data

Each new enrollee who entered the McKinney Job Corps Center from January 7, 1976 to March 3, 1976 was administered the RJSI, MJSI, TSCS, TMAS, and MPCL. Personal data about each new enrollee were collected for pertinent background information in an interview with the counselor.

The three categories or groups of students were formulated in the following manner:

1. The students who left the McKinney Job Corps Center within thirty days after entering the program were placed in Category III group.
2. The students who left the McKinney Job Corps Center before graduation (completion of the program), but stayed at the center more than thirty days, were placed in Category II group.
3. The students who completed the program and graduated from the McKinney Job Corps Center were placed in Category I group.

Post-test data were collected from a sample of twenty-seven students, who were still present at the Job Corps Center approximately six months after pre-testing, in order to present data to estimate test score reliability.

Data pertaining to negative behavior reports were collected from the files of each student at the Center Standards Officer's office. Students' permanent home addresses were used as an indicator of the students' geographic backgrounds.

Procedure of the Treatment of Data

Eight of the hypotheses were tested by the use of one-way analysis of variance to determine whether significant differences existed among the mean scores on each of the instruments for the three respective groups.

If the obtained F-ratios were found to be significant, the Scheffé F test was applied to determine where the differences occurred. The Scheffé F test is utilized for comparison between all types of means.

One hypothesis was tested with the chi square test of independence. That hypothesis related to the significance of geographic background among the graduates and non-graduates from the McKinney Job Corps Center.

The .05 level of significance was used in this study. Null hypotheses were retained if this level of significance was not reached.

All of the test answer sheets were hand scored except for TSCS, which was machine scored at the Counselor Recordings and Tests, Nashville, Tennessee. The data were processed and analyzed at the North Texas State University Computer Center.

Summary

This study was conducted at the McKinney Job Corps Center, McKinney, Texas, from January 7, 1976 through March 3, 1976. All subjects were the new enrollees who entered the Job Corps program during this period. A total of 200 female students participated in this study, whose ages ranged from sixteen years to twenty-one years. The median age of the subjects was seventeen years. All of the subjects belonged to the lowest socioeconomic class and were members of minority groups of either black, chicano, Indian, Puerto Rican or underprivileged whites. The median school grade completed was tenth grade. The students represented most of the states of the United States of America.

To measure the psychological variables, the Tennessee Self-Concept Scale, the Taylor Manifest Anxiety Scale, and the Mooney Problem Check List as well as the student's negative behavior record were employed. To measure the academic variables of the students, Job Corps Mathematics Skills Inventory and Job Corps Reading Skills Inventory were used. The permanent home address was used as an indicator of geographic background.

The subjects' responses to these instruments were hand scored except for TSCS which was machine scored. The data were processed at the North Texas State University Computer Center.

Eight hypotheses were subjected to analysis of variance, one-way design for a test of significance. The Scheffé F test was used to determine which group means differed significantly when a significant F-ratio was found.

The chi square test of independence was applied on one hypothesis related to students' geographic backgrounds and the .05 level of significance was used for these tests.

CHAPTER BIBLIOGRAPHY

1. Fitts, W. H., Tennessee Self-Concept Scale Manual, Counselor Recordings and Tests, 1965.

2. Job Corps Mathematics Program Manual, Manpower Administration, United States Department of Labor, 1973, pp. 7-10.

3. Job Corps Reading Manual, Manpower Administration, United States Department of Labor, 1974, pp. 3-5.

4. Mooney, Ross L., Mooney Problem Check List Manual, The Psychological Corporation, New York,

5. Taylor, Janet A., "A Personality Scale of Manifest Anxiety," Journal of Abnormal and Social Psychology, 48 (1953), 285-290.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The purpose of this chapter is to present and analyze the findings of this investigation. The data will be examined as they relate to each hypothesis.

Analysis of Data

For the testing purposes, the stated hypotheses of Chapter I are restated in the null form. When the null hypothesis is rejected, the stated hypothesis is accepted.

Hypothesis 1

Null Hypothesis 1 states that the three categories of McKinney Job Corps students will not differ significantly with respect to mean scores on the variable RJSI. The mean scores for Category I will not be significantly higher than the mean scores for Category II and Category III and that the mean scores for Category II will not be significantly higher than the mean scores for Category III.

Table IV contains the means and standard deviations on the variable RJSI for the three categories of McKinney Job Corps students. The data in Table IV indicate that the three groups, Category I, Category II, and Category III, are very similar with respect to both mean scores and standard deviations on the variable RJSI. The highest mean was attained by

Category I and the greatest variability of scores was shown by Category III.

TABLE IV

MEAN AND STANDARD DEVIATIONS FOR THE THREE CATEGORIES OF CORPS MEMBERS ON THE VARIABLE RJSI

Group	N	Mean	Standard Deviation
Category I	82	14.15854	4.77511
Category II	69	13.75362	5.09153
Category III	49	12.59184	5.38872

A statistical comparison of the group means was accomplished by a one-way analysis of variance. The analysis of variance data for the comparison of means of the three categories are shown in Table V.

TABLE V

ANALYSIS OF VARIANCE DATA FOR THE COMPARISON OF MEANS FOR CATEGORY I, CATEGORY II, AND CATEGORY III ON THE VARIABLE RJSI

Source of Variance	Sum of Squares	Degrees of Freedom	F-Ratio	P
Between	76.7676	2		
Within	5003.5874	197	1.5112	0.2232
Total	5080.3550	199		

The F-ratio of 1.5112 is not high enough to be significant at the desired level of .05, so the null hypothesis is retained and the alternative hypothesis is not accepted. That is, the first hypothesis which stated that the three

groups would differ significantly with respect to mean scores on the RJSI, is rejected.

Hypothesis 2

Null Hypothesis 2 states that each of the three categories of Job Corps students will not differ significantly with respect to mean scores on the variable MJSI. The mean score for Category I will not be significantly higher than the mean score for Category II and Category III. The mean score for Category II will not be significantly higher than the mean score for Category III.

Table VI contains the means and standard deviations on the variable MJSI for the three categories of Job Corps students.

TABLE VI

MEANS AND STANDARD DEVIATIONS FOR THE THREE CATEGORIES OF CORPS MEMBERS OF VARIABLE MJSI

Group	N	Mean	Standard Deviation
Category I	82	47.30488	18.40336
Category II	69	41.85507	19.39093
Category III	49	41.51020	19.60243

The mean score for Category I on the variable MJSI was noticably higher than the mean scores for the other two categories. The standard deviations were quite similar, indicating similar variability.

A comparison of the group means was attained by the one-way analysis of variance. The analysis of variance data pertaining to Hypothesis 2 are shown in Table VII.

TABLE VII

ANALYSIS OF VARIANCE DATA FOR THE COMPARISON OF MEANS FOR CATEGORY I, CATEGORY II, AND CATEGORY III ON THE VARIABLE MJSI

Source of Variance	Sum of Squares	Degrees of Freedom	F-Ratio	P
Between	1516.8213	2		
Within	71446.1737	197	2.0912	0.1263
Total	72962.9950	199		

The F-ratio of 2.0912 was not high enough to be significant at the desired .05 level, so the null Hypothesis 2 was retained. Category I scores did not differ enough to permit retention of stated Hypothesis 2 which predicted that the three categories of Job Corps students would differ significantly with respect to mean scores on the variable MJSI.

Hypothesis 3

Null Hypothesis 3 states that the three categories of Job Corps students will not differ significantly with respect to mean number of problems indicated on the ten categories of the variable Mooney Problem Check List. The mean number of problems for Category I will not be significantly lower than

the mean number of problems for Category II and Category III. The mean number of problems for Category II will not be significantly lower than the mean number of problems for Category III.

Table VIII contains the means and standard deviations on the variable MPCL for the three categories of Job Corps students.

TABLE VIII

MEANS AND STANDARD DEVIATIONS FOR THE THREE CATEGORIES OF CORPS MEMBERS ON THE VARIABLE MOONEY PROBLEM CHECK LIST

Group	N	Mean	Standard Deviation
Category I	82	39.41463	43.05206
Category II	69	43.26087	45.36151
Category III	49	29.77551	24.41334

The mean score for Category III was considerably lower than the mean score for Category I and Category II. Also Category III has a lower standard deviation than the other two categories of students, indicating lower score variability.

A comparison of the group means was accomplished by a one-way analysis of variance. The analysis of variance data for the comparison of the means of the three categories of Job Corps students are shown in Table IX.

TABLE IX

ANALYSIS OF VARIANCE DATA FOR THE COMPARISON OF MEANS FOR CATEGORY I, CATEGORY II, AND CATEGORY III ON THE VARIABLE MOONEY PROBLEM CHECK LIST

Source of Variance	Sum of Squares	Degrees of Freedom	F-Ratio	P
Between	5359.3826	2		
Within	318661.7374	197	1.6566	0.1934
Total	324021.1200	199		

The F-ratio of 1.6566 is not high enough to be significant at the .05 level. Therefore, Null Hypothesis 3 was retained, which means that the three categories of Job Corps students did not differ significantly from each other. The stated hypothesis was rejected.

Hypothesis 4

Null Hypothesis 4 states that the three categories of Job Corp students will not differ significantly with respect to mean total positive scores on the Tennessee Self-Concept Scale. The mean total positive score for Category I will not be higher than the mean total positive score for Category II and Category III. The mean total positive score for Category II will not be higher than the mean total positive score for Category III.

Table X contains the means and standard deviations on the variable TSCS-TP (Total Positive Score) for the three categories of McKinney Job Corps students.

TABLE X

MEANS AND STANDARD DEVIATION FOR THE THREE CATEGORIES OF CORPS MEMBERS ON THE VARIABLE TSCS-TP

Group	N	Mean	Standard Deviation
Category I	82	327.67073	32.49048
Category II	69	319.82609	35.52255
Category III	49	333.81633	37.60246

The data in Table X indicate that the three categories are quite similar with respect to both mean scores and standard deviations on the variable TSCS-TP, even though Category III possessed the highest mean and standard deviation.

A comparison of the group means was accomplished by a one-way analysis of variance. The analysis of variance data for the comparison of means of the three categories are shown in Table XI The F-ratio of 2.3920, although relatively large, is not large enough to be significant at the desired .05 level. The null hypothesis is retained and the stated Hypothesis 4 is rejected. The differences in the mean scores for the variable TSCS-TP are not great enough to assume

that the three groups really differ significantly on this variable, when the .05 level of significance is applied.

TABLE XI

ANALYSIS OF VARIANCE DATA FOR THE COMPARISON OF MEANS FOR CATEGORY I, CATEGORY II, AND CATEGORY III ON THE VARIABLE TSCS-TP

Source of Variance	Sum of Squares	Degrees of Freedom	F-Ratio	P
Between	5808.4503	2		
Within	239181.3697	197	2.3920	0.0941
Total	244989.8200	199		

Hypothesis 5

Null Hypothesis 5 states that the three categories of Job Corps students will not differ significantly with respect to mean self-criticism scores on the Tennessee Self-Concept Scale. The mean self-criticism scale for Category I will not be lower than the mean self-criticism score for Category II and Category III. The mean self-criticism score for Category II will not be lower than the mean self-criticism score for Category III.

Table XII contains the means and standard deviations on the variable TSCS-SC (Self-Criticism) for the three categories of McKinney Job Corps students.

TABLE XII

MEANS AND STANDARD DEVIATIONS FOR THE THREE CATEGORIES OF CORPS MEMBERS ON THE VARIABLE TSCS-SC

Group	N	Mean	Standard Deviation
Category I	82	33.98780	6.38187
Category II	69	34.31884	7.08871
Category III	49	31.71429	5.93015

The data in Table XII indicate that the mean scores do not differ significantly. The three categories are quite similar with respect to mean scores as well as standard deviations on the variable TSCS-SC.

A comparison of the group mean was accomplished by a one-way analysis of variance design. The analysis of variance data for the comparison of means of the three categories are shown in Table XIII.

TABLE XIII

ANALYSIS OF VARIANCE DATA FOR THE COMPARISON OF MEANS FOR CATEGORY I, CATEGORY II, AND CATEGORY III ON THE VARIABLE TSCS-SC

Source of Variance	Sum of Squares	Degrees of Freedom	F-Ratio	P
Between	221.6217	2		
Within	8403.9733	197	2.5975	0.0770
Total	8625.5950	199		

The F-ratio of 2.5975 is not quite high enough to be significant at the .05 level. Therefore, Null Hypothesis 5 is retained and the stated Hypothesis 5 is rejected. While Category II has a higher mean score than Category I, and Category I has a higher mean score than Category III, the differences are not great enough to be considered significant. Thus, it can not be assumed that any of the groups is superior to the others with respect to self-criticism scores on the variable TSCS.

Hypothesis 6

Null Hypothesis 6 states that the three categories of Job Corps students will not differ significantly with respect to mean scores on the Taylor Manifest Anxiety Scale. The mean anxiety score for Category I will not be significantly lower than the mean anxiety score for Category II and Category III. The mean anxiety score for Category II will not be lower than the mean anxiety score for Category III.

Table XIV contains the means and standard deviations on the variable TMAS for the three categories of Job Corps students.

The data in Table XIV indicate that the three categories are similar with respect to mean scores and standard deviation on the variable TMAS, even though Category III does indicate a higher mean score and standard deviation.

TABLE XIV

MEANS AND STANDARD DEVIATIONS FOR THE THREE CATEGORIES OF CORPS MEMBERS ON THE VARIABLE TMAS

Group	N	Mean	Standard Deviation
Category I	82	19.89024	6.57907
Category II	69	21.62319	6.40336
Category III	49	22.61224	8.24069

A comparison of the group means was accomplished by the one-way analysis of variance design. The analysis of variance data for the comparison of means of the three categories of Job Corps students are shown in Table XV.

TABLE XV

ANALYSIS OF VARIANCE DATA FOR THE COMPARISON OF MEANS FOR CATEGORY I, CATEGORY II, AND CATEGORY III ON THE VARIABLE TMAS

Source of Variance	Sum of Squares	Degrees of Freedom	F-Ratio	P
Between	250.3473	2		
Within	9553.8477	197	2.5811	0.0782
Total	9804.1950	199		

The F-ratio of 2.5811 is not quite high enough to be significant at the .05 level. The null hypothesis is retained and the stated Hypothesis 6 is not accepted. While the Category I group appears to show much less anxiety than the other two groups, the differences can not be regarded as significant.

Hypothesis 7

Null Hypothesis 7 states that the three categories of Job Corps students will not differ significantly with respect to the mean chronological age. The mean chronological age for Category I will not be significantly higher than the mean chronological age for Category II and Category III. The mean chronological age for Category II will not be higher than the mean chronological age for Category III.

Table XVI contains the means and standard deviations on the variable chronological age for the three categories of McKinney Job Corps students.

TABLE XVI

MEANS AND STANDARD DEVIATION FOR THE THREE CATEGORIES OF JOB CORPS MEMBERS ON THE VARIABLE CHRONOLOGICAL AGE

Group	N	Mean	Standard Deviation
Category I	82	18.60976	1.47201
Category II	69	17.75510	1.35997
Category III	49	17.72464	1.56166

The data in Table XVI indicate that the mean chronological age is much higher for Category I than for Category II and Category III. The standard deviation for the three categories are very low and similar indicating low variability for the three categories.

A comparison of the group means was accomplished by a one-way analysis of variance. The analysis of variance data for the comparison of the means of the three categories are shown in Table XVII.

TABLE XVII

ANALYSIS OF VARIANCE DATA FOR THE COMPARISON OF MEANS FOR CATEGORY I, CATEGORY II, AND CATEGORY III ON THE VARIABLE CHRONOLOGICAL AGE

Source of Variance	Sum of Squares	Degrees of Freedom	F-Ratio	P
Between	36.8535	2		
Within	418.3415	197	8.6773	.0002
Total	455.1950	199		

The F-ratio of 8.6773 is highly significant. A low P value indicates a great amount of difference between the mean age for the three categories. The Scheffé test indicated that the Category I students were significantly older than the Category II and Category III students.

Hypothesis 8

Null Hypothesis 8 states that the two groups of Job Corps students (graduates of Category I and non-graduates of Category II and Category III) will not differ significantly with respect to geographic background. A significantly greater number of graduates (Category I) than non-graduates (Category II and Category III) will not have urban backgrounds rather than rural backgrounds.

Table XVIII shows the number of Job Corps students who came from either urban or rural backgrounds.

TABLE XVIII

NUMBER OF JOB CORPS STUDENTS ACCORDING TO GEOGRAPHIC BACKGROUND

Group	Urban	Rural	Total
Category I	49	33	82
Category II	37	32	69
Category III	31	18	49
Total	117	83	200

It can be seen in Table XVIII that more Job Corps students came from urban than rural backgrounds. When the chi square test of independence was applied to the data, it was found that the differences in numbers of graduates for the two groups with respect to urban-rural background were not

significant. The actual chi square value of .78269 was significant at the .6762 level which is far from the desired significance level of .05. Therefore, Null Hypothesis 8 was retained and stated Hypothesis 8 was not accepted.

Hypothesis 9

Null Hypothesis 9 states that the three categories of Job Corps students will not differ significantly with respect to mean scores on the variable of negative behavior. The mean score for Category I will not be significantly lower than the mean score for Category II and Category III.

Table XIX contains the means and standard deviations on the variable negative behavior for the three categories of Job Corps students.

TABLE XIX

MEANS AND STANDARD DEVIATION FOR THE THREE CATEGORIES OF CORPS MEMBERS ON THE VARIABLE NEGATIVE BEHAVIOR

Group	N	Mean	Standard Deviation
Category I	82	3.91463	4.19053
Category II	69	8.46377	6.88259
Category III	49	1.71429	2.38921

The mean score for Category II appears to be considerably higher than the other two means. Also, Category II appears

to have much greater variability, in terms of number of reported incidents of negative behavior, than the other two categories.

A comparison of the group mean was accomplished by a one-way analysis of variance design. The analysis of variance data for the comparison of the means of the three categories are shown in Table XX.

TABLE XX

ANALYSIS OF VARIANCE DATA FOR THE COMPARISON OF MEANS FOR CATEGORY I, CATEGORY II, AND CATEGORY III ON THE VARIABLE NEGATIVE BEHAVIOR

Source of Variance	Sum of Squares	Degrees of Freedom	F-Ratio	P
Between	1452.8331	2		
Within	4917.5619	197	29.1006	0.0000
Total	6370.3950	199		

The F-ratio of 29.1006 is very high and very significant. The extremely low P value indicates that there is a great amount of difference between the mean scores for the three groups on the variable of negative behavior. The Scheffé test indicated that all three groups differed significantly from each other. That is, Category II had significantly more reports of negative behavior than both Category I and Category III, and Category I had significantly more reports than

Category III. The fact that Category III students spent much less time at the center than the other groups, probably accounts for their relatively low mean number of reports.

Summary

The data were presented and analyzed in this chapter. To facilitate the statistical analysis of data, all original hypotheses were restated in the null form.

All hypothesis except Hypothesis 8 were subjected to one-way analysis of variance and the Scheffé F-test of significance. For Hypothesis 8 the chi square test of independence was used to determine the significance of geographic backgrounds.

The original hypotheses and the results of statistical analysis were as follows:

Hypothesis 1 stated that the three categories of McKinney Job Corps students would differ significantly with respect to mean scores on the variable RJSI. The mean score for Category I would be higher than the mean score for Category II and Category III. The mean score for Category II would be higher than the mean score for Category III.

The mean differences among the three categories of Job Corps students were not significant at the .05 level. Therefore, original Hypothesis 1 was rejected.

Hypothesis 2 stated that the three categories of Job Corps students would differ significantly with respect to

mean scores on the variable MJSI. The mean score for Category I would be significantly higher than the mean score for Category II and Category III. The mean score for Category II would be significantly higher than the mean score for Category III.

The mean differences among the three categories of Job Corps students on the variable MJSI were not significant at the .05 level. Therefore, Hypothesis 2 was rejected.

Hypothesis 3 stated that the three categories of Job Corps students would differ significantly with respect to the mean number of problems indicated on ten categories of the Mooney Problem Check List. The mean number of problems for Category I would be lower than the mean number of problems for Category II and Category III. The mean number of problems for Category II would be lower than the mean number of problems for Category III.

The mean differences among the three categories of Job Corps students on the variable MPCL were not significant at the .05 level. Therefore, Hypothesis 3 was rejected.

Hypothesis 4 stated that the three categories of Job Corps students would differ significantly with respect to mean total positive scores on the Tennessee Self-Concept Scale. The mean total positive score for Category I would be significantly higher than the mean total positive score for Category II and Category III. The mean total positive

score for Category II would be significantly higher than the mean total positive score for Category III.

The mean differences among the three categories of Job Corps students on the variable TSCS-TP were not significant at the .05 level. Therefore, Hypothesis 4 was rejected.

Hypothesis 5 stated that the three categories of Job Corps students would differ significantly with respect to mean self-criticism scores on TSCS. The mean self-criticism score for Category I would be significantly higher than the mean self-criticism score for Category II and Category III. The mean self-criticism score for Category II would be significantly higher than the mean self-criticism score for Category III.

The mean differences among the three categories of Job Corps students on the variable TSCS-SC were not significant at the .05 level. Therefore, Hypothesis 5 was rejected.

Hypothesis 6 stated that the three categories of Job Corps students would differ significantly with respect to mean anxiety scores on the variable Taylor Manifest Anxiety Scale. The mean anxiety score for Category I would be significantly lower than the mean anxiety score for Category II and Category III. The mean anxiety score for Category II would be significantly lower than the mean anxiety score for Category III.

The mean differences among the three categories of Job Corps students on the variable TMAS were not significant

at the .05 level. Therefore, original Hypothesis 6 was rejected.

Hypothesis 7 stated that the three categories of Job Corps students would differ significantly with respect to mean chronological age. The mean chronological age for Category I would be significantly higher than the mean chronological age for Category II and Category III. The mean chronological age for Category II would be significantly higher than the mean chronological age for Category III.

The mean chronological age for Category I was significantly higher than the mean chronological age for Category II and for Category III. The differences were significant at the .05 level. Therefore, Hypothesis 7 was accepted.

Hypothesis 8 stated that the two groups of Job Corps students (graduates of Category I and non-graduates of Category II and Category III) would differ significantly with respect to geographic background. A significantly greater number of graduates (Category I) than non-graduates (Category II and Category III) would have urban backgrounds rather than rural backgrounds.

The differences in the two groups of Job Corps students, graduates and non-graduates, were not significant at the .05 level. Therefore, Hypothesis 8 was rejected.

Hypothesis 9 stated that the three categories of Job Corps students would differ significantly with respect to mean scores on the variable of negative behavior. The mean

score for Category I would be significantly lower than the mean score for Category II and Category III.

The mean differences among the three categories were significant at the .05 level. Category I had significantly lower mean scores than Category II. This part of the hypothesis was accepted. Category I did not have lower mean scores than Category III, so this part of the hypothesis was rejected.

CHAPTER BIBLIOGRAPHY

1. Scheffé, Henry, "A Method for Judging all Contrasts in the Analysis of Variance," Biometrika, 40 (June, 1953), 87-104.

2. Winer, J. B., Statistical Principles in Experimental Design, New York, McGraw-Hill Book Co., 1962.

CHAPTER V

SUMMARY, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

This study was conducted at the McKinney Job Corps Center, McKinney, Texas from January 7, 1976 through March 3, 1976. The subjects were two hundred females of lower socio-economic class whose ages ranged from sixteen to twenty-one years. The subjects came from diverse geographic locations.

The problem of this study was to discover whether there were any psychological and academic differences between the McKinney Job Corps graduates and non-graduates.

Summary of the Purpose and Background

The purpose of the study was to determine whether significant academic and personality differences existed among McKinney Job Corps graduates, Category I, and non-graduates, Category II and Category III, and to determine the nature of the differences when significant differences were found.

The study was based on the need to investigate the relationship between academic achievement and certain selected academic and personality variables because no such relationships have previously been investigated in the Job Corps setting. Such information concerning graduates and

non-graduates was considered necessary for future guidance of Job Corps students.

Summary of Methods and Procedures

To obtain data for the academic variables for this study the Reading Job Corps Skills Inventory (RJSI) and Mathematics Job Corps Skills Inventory (MJSI) were administered to the two hundred subjects. To obtain data for the psychological variables of the subjects the Tennessee Self-Concept Scale (TSCS), the Taylor Manifest Anxiety Scale (TMAS), and the Mooney Problem Check List (MPCL) were administered to the same 200 students.

The permanent home address of the subjects was used to determine the geographic background of each student. Information regarding negative behavior records was collected from each student's file at the Center Standards Office (CSO) at the McKinney Job Corps Center. Pertinent personal background information for each subject was gathered from the initial interview with the counselor.

One-way analysis of variance design was used to test the hypotheses that significant differences existed among the three categories of Job Corps students with regard to certain selected academic variables measured by RJSI and MJSI, as well as psychological variables measured by TSCS, TMAS, MPCL and chronological age. The Scheffé F-test was

used to determine which group means differed significantly when a significant F-ratio was found.

The chi square test of independence was used to find significant differences among two categories of students (graduates and non-graduates) on the variable of geographic background.

Nine hypotheses were formulated. Each hypothesis was tested at the .05 level of significance.

Review of Findings

Hypothesis 1 predicted that the three categories of Job Corps students would differ significantly with respect to mean scores on the RJSI. It was predicted that the mean score for Category I would be higher than the mean score for Category II and Category III. The mean score for Category II would be higher than the mean score for Category III.

The statistical analysis of data pertaining to Hypothesis 1 failed to support this hypothesis. The three categories of students did not differ significantly with respect to their performance on the variable RJSI. This means that the three groups did not differ greatly in the area of reading ability.

Hypothesis 2 predicted that the three categories of Job Corps students would differ significantly with respect to mean scores on the MJSI. It was predicted that the mean score for Category I would be significantly higher than the mean score for Category II and Category III. The mean score for Category II would be higher than the mean score for Category III.

The statistical analysis of data pertaining to Hypothesis 2 failed to support this hypothesis. The three categories of Job Corps students did not differ significantly with respect to their performance on the variable MJSI. This means that the three groups did not differ greatly as far as their mathematical ability was concerned.

Hypothesis 3 predicted that the three categories of Job Corps students would differ significantly with respect to mean number of problems indicated on the ten categories of the Mooney Problem Check List. It was predicted that the mean number of problems for Category I would be lower than the mean number of problems for Category II and Category III. The mean number of problems for Category II would be lower than the mean number of problems for Category III.

The statistical analysis of data pertaining to Hypothesis 3 failed to support this hypothesis. The three categories of students did not differ significantly with respect to mean number of problems on the variable MPCL. This means that the three groups did not differ greatly as far as their personal problems were concerned.

Hypothesis 4 predicted that the three categories of Job Corps students would differ significantly with respect to mean total positive score on the Tennessee Self-Concept Scale. It was predicted that the mean total positive score for Category I would be higher than the mean total positive score for Category II and Category III. The mean total

positive score for Category II would be higher than the mean total positive score for Category III.

The statistical analysis of data pertaining to Hypothesis 4 failed to support this hypothesis. The three categories of students did not differ significantly with respect to their mean total positive scores on the variable TSCS. This means that the three groups did not differ greatly as far as their self-concept was concerned.

Hypothesis 5 predicted that the three categories of Job Corps students would differ significantly with respect to mean self-criticism scores on the Tennessee Self-Concept Scale. It was predicted that the mean self-criticism score for Category I would be higher than the mean self-criticism score for Category II and Category III. The mean self-criticism score for Category II would be higher than the mean self-criticism score for Category III.

The statistical analysis of data pertaining to Hypothesis 5 failed to support this hypothesis. The three categories of students did not differ significantly with respect to their mean self-criticism scores on the variable TSCS. This means that the three groups did not differ greatly as far as their ability to accept criticism was concerned.

Hypothesis 6 predicted that the three categories of Job Corps students would differ significantly with respect to mean anxiety scores on the Taylor Manifest Anxiety Scale.

It was predicted that the mean anxiety score for Category I would be lower than the mean anxiety score for Category II and Category III. The mean anxiety score for Category II would be lower than the mean anxiety score for Category III.

The statistical analysis of data pertaining to Hypothesis 6 failed to support this hypothesis. The three categories of students did not differ significantly with respect to their mean anxiety scores on the variable TMAS. This means that the three groups did not differ greatly as far as their anxiety level was concerned.

Hypothesis 7 predicted that the three categories of Job Corps students would differ significantly with respect to mean chronological age. It was predicted that the mean chronological age for Category I would be higher than the mean chronological age for Category II and Category III. The mean chronological age for Category II would be higher than the mean chronological age for Category III.

The statistical analysis of data pertaining to Hypothesis 7 supported this hypothesis. The three categories of students differed significantly at the .05 level with respect to mean chronological age. This means that the three groups differed greatly as far as their average age was concerned. The graduates (Category I) were significantly older than the non-graduates (Category II and Category III).

Hypothesis 8 predicted that the graduates (Category I) and the non-graduates (Category II and Category III) would

differ significantly with respect to geographic background. It was predicted that a significantly greater number of graduates (Category I) than non-graduates (Category II and Category III) would have urban backgrounds rather than rural backgrounds.

The statistical analysis of data pertaining to Hypothesis 8 failed to support this hypothesis. The two groups of students did not differ significantly with respect to their place of permanent residence. This means that the two groups of graduates (Category I) and non-graduates (Category II and Category III) did not differ significantly as far as urban or rural background was concerned. It did not seem to matter whether they came from an urban or rural geographic area as far as graduation from the Job Corps program was concerned.

Hypothesis 9 predicted that the three categories of Job Corps students would differ significantly with respect to mean score on the variable negative behavior (misconduct). The mean score for Category I would be significantly lower than the mean score for Category II and Category III.

The statistical analysis of data pertaining to Hypothesis 9 supported this hypothesis. The three categories of students differed significantly with respect to mean frequency count on the variable negative behavior. This means that the three groups differed greatly as far as their misconduct at the Job Corps Center was concerned. The graduates, Category I, had significantly fewer reports of misconduct (negative

behavior) than Category II. Category III students had significantly fewer reports than Category I and Category II.

Although no hypothesis was formulated for highest school grade completed, a statistical analysis was made for this variable. Statistical significance was found at the .001 level. The mean highest grade completed by Category I was 10.45. Mean highest grades completed by Category II and Category III were 9.73 and 9.63 respectively. Category I differed significantly from Category II and Category III. The graduates reached a significantly higher grade level when in school than the non-graduates.

As a partial test of the reliability of test data, the graduate students who were still at the center were retested on the Mooney Problem Check List, the Tennessee Self-Concept Scale, and the Taylor Manifest Anxiety Scale. The Pearson product-moment correlation coefficient of reliability for the Mooney Problem Check List was .76, while for the Tennessee Self-Concept Scale it was .74 and for the Taylor Manifest Anxiety Scale it was .60. These data indicate that the reliability of the test data is not as high as generally one would desire.

Discussion

Certain studies reviewed in Chapter II (5, 7, 8, 9, 10, 12, 13) formed the basis for Hypothesis 1 and Hypothesis 2 on

the academic variables of RJSI and MJSI. Even though these hypotheses were not statistically significant, the mean scores of the three categories leaned toward the hypothesized direction of this study and the findings of other studies.

There were a number of graduates, Category I, included in the sample who could not read. They came to the center for a vocational skill. This influenced the findings by lowering the mean RJSI and MJSI scores for Category I, the result being that the .05 level of significance was not attained.

The findings of the present study were contradictory to the findings of studies by Neufeld (12), Lohan and Gary (9, 10), and Newman (13).

A number of studies reviewed in Chapter II (1, 2, 3, 4, 5, 6, 10, 14, 15, 16, 19) helped in formulating Hypothesis 4, Hypothesis 5, and Hypothesis 6 which relate to the psychological variables of TSCS-TP and SC and TMAS. Even though Hypothesis 4, Hypothesis 5, and Hypothesis 6 approached the statistical level of significance, the F-ratio was not high enough to be significant at the .05 level. Therefore, these three hypotheses dealing with psychological measurement were rejected.

Again the findings may have been influenced by the fact that the sample group contained non-readers. Even though the questions and word meanings were explained,

sensitive non-readers probably hesitated to ask questions, since testing took place in small groups.

The findings of the present study were contrary to the findings of Davison and Lang (2), Frost (4), Mangieri (10), Sinha (16), and Williams (19) who found that these psychological variables were significantly related to academic performance.

Hypothesis 9, related to the personality variable, negative behavior, was statistically significant at the desired .05 level. However, there remains a doubt about the validity of this finding. All observed negative behavior did not reach the center standards officer and his files, much less unobserved negative behavior of the students. This fact rendered the data inadequate and the validity of the findings doubtful. There are studies conducted by Lloyd (7), Neufeld (12), Thornburg (17), and Tseng (18), that support the findings of this study.

Hypothesis 7 related to the variable chronological age. This hypothesis concerning the three categories of Job Corps students and their mean chronological age was statistically significant at the .05 level. This means that, other variables being equal, the older student (mean age 18.60 years) will have a significantly better chance ($P = .0002$) of graduating from the Job Corps than a younger student (mean age 17.72). Theories of adolescent development complement the findings of this study on the variable chronological

age--older students generally are more responsible and stable than younger students.

Hypothesis 8 dealt with the variable geographic background of the students. Statistical data indicated that the three categories of Job Corps students did not differ significantly with respect to the variable geographic background. Data collected were not reliable. Students' permanent home address was used as an indicator of rural or urban background. National trends of population movement indicate that there has been a steady migration from rural to urban areas. This means that a substantial number of the sample could have been brought up in rural areas and later moved to urban areas, thus invalidating the findings of this study.

Hypothesis 3 related to the variable Mooney Problem Check List was not statistically significant. This instrument is too long, involved, and difficult to complete for the population of this study. Most of the subjects returned the forms blank or underlined the questions randomly just to finish the MPCL, thus making the test data inadequate and invalid.

Conclusions

Five conclusions, limited to the investigated population of the McKinney Job Corps Center, may be drawn from this study. They are as follows:

1. Age is an important variable with respect to success at the McKinney Job Corps Center. Older students tend to show a greater probability for graduation than younger students.

2. Job Corps graduates are less likely to exhibit negative behavior than non-graduates. Perhaps the graduates achieve better because their social skills are better developed than those of non-graduates.

3. Academic variables generally do not appear to be useful indicators of success in the Job Corps training program.

4. Job Corps graduates are more likely to have positive self-concepts than non-graduates.

5. McKinney Job Corps graduates tend to be less anxious than non-graduates.

Recommendations

1. In future research of this type, other instruments that use broader scope of measurements than those used in the present study should be used to measure the desired academic and personality variables.

2. Perhaps the chronological age for admission into Job Corps should be raised to approximately eighteen years.

3. Before the time of official admission each incoming student at the Job Corps should have an entry interview with a counselor.

4. There should be a follow-up study made of all graduates and dropouts to gather data that may be useful for improvement of Job Corps training.

5. The variable of negative behavior needs to be re-examined for the purpose of validity.

6. Tests should not be administered during the orientation period. They should be conducted during the second week after the new students have had a chance to adjust to Job Corps environment.

7. A study should be conducted dealing with the effects of intensive counseling on the academic achievement of Job Corps students.

CHAPTER BIBLIOGRAPHY

1. Berry, Gordon L., "Self Concept and Need Factors of Inner-City High School Adolescent and Dropouts," Child Study Journal, 4 (1974), 21-31.

2. Davidson, H. H. and G. Lang, "Children's Perceptions of Their Teacher's Feelings Toward Them Related to Self-Perception, School Achievement, and Behavior," Journal of Experimental Education, 129 (1960), 107-118.

3. Doyle, G. T. and R. J. Friedman, "Anxiety in Children: Some Observations for the School Psychologist," Psychology in the Schools, 11 (April, 1974), 161-164.

4. Frost, Barry P., "Anxiety and Educational Achievement," British Journal of Educational Psychology, 38 (1968), 293-301.

5. Gillham, Isabel, "Self-Concept and Reading," Reading Teacher, 21 (1967), 270-273.

6. Hawk, J., "Self Concepts of the Socially Disadvantaged," Elementary School Journal, 67 (Jan., 1967), 196-206.

7. Lloyd, Dee Norman, "Reading Achievement and Its Relation to Academic Performance, Part I, Reading Differences in Elementary School--Relationship to Secondary School Performance," unpublished doctoral dissertation, National Institute of Health, Bethesda, Md., March, 1969.

8. Lohnes, Paul R and Marian Gary, "Intellectual Development and the Cooperative Reading Studies," Reading Research Quarterly, 8 (February, 1972), 52-61.

9. _____, "Intelligence and Cooperative Reading Studies," Reading Research Quarterly, 7 (September, 1972), 466-476.

10. Mangieri, John N. and Henry D. Olsen, "The Effect of Reading Ability on Self-Concept of Academic Ability of College Students," Paper presented the the meeting of the American Educational Research Association, Washington, D. C., March 30-April 3, 1975.

11. Morgan, G. D., "The Ghetto College Student: A Descriptive Essay on College Youth from the Inner-City," American College Testing Program, Iowa City, 1970.

12. Neufeld, Allen K., "Differences in Personality--Characteristics between Groups Being High and Low Math Achievement Gain Under Individualized Instruction," unpublished doctoral dissertation

13. Newman, Annabel, "Later Achievement Study of Pupils Underachieving in Reading in the First Grade," Reading Research Quarterly, 7 (Sept., 1972), 477-508.

14. Ryan, Charles W., The Portland Spring Story, American Association of Colleges for Teacher Education, 1970.

15. Sarason, et al., Anxiety in Elementary School Children, New York, John Wiley, 1960.

16. Sinha, N. C., "A Study of Relationship between Manifest Anxiety and Scholastic Achievement," Journal of the Indian Academy of Applied Psychology, 9 (1972), 65-67.

17. Thomburg, Hershel D., "An Investigation of a Dropout Program Among Arizona's Minority Youth," Education, 94 (February, 1974), 249-265.

18. Tseng, M. S., "Locus of Control as a Determinant of Job Proficiency, Employability, and Training Satisfaction of Vocational Rehabilitation Clients," Journal of Counseling Psychology, 17 (1970), 487-491.

19. Williams, Robert L., "Personality, Ability, and Achievement Correlates of Scholastic Attitudes," Journal of Educational Research, 63 (May/June, 1970), 401-403.

APPENDICES

APPENDIX A

NAME _____ SS No. _____ Score _____

READING ANALYSIS

INSTRUCTIONS: Here are some sentences with missing words. Choose the word that makes the most sense to fill in each missing word. A blank with a number shows a word is missing. Four words that might go in the blank are given below with the same number. Show the word you think makes the most sense in the blank by writing an X in the blank by the correct word. Look at the first sentence. The missing word is chosen from the words under number 1. The correct word, "nickel," has been marked with an X in the blank next to it. Try the next one.

Five cents is called a ____1____.

To stop a car you step on the ____2____.

1	2
___penny	___gas
___quarter	___brake
___nickel	___horn
___dollar	___cake

What a difference there is between a bark and a growl! When a dog barks he throws his head high. A bark is not a war cry. But when a dog growls, he __3__ his head. A growl may mean he is ready to fight. The dog must guard his throat when he fights with another animal. If a dog comes barking to meet you, you are in no __4__.

3	4
___heads	___friend
___raises	___safety
___lowers	___danger
___looses	___house

Do you know that many farmers buy ladybugs for their gardens? Ladybugs never eat plants. They eat other __5__ that do eat plants. Mr. Sam Quick sells ladybugs to __6__. Many men work for him. Mr. Quick's men look in trees for sleeping __7__. They sleep on cool tree leaves. The men put sheets on the ground. Then they shake the __8__. When the bugs fall, the men pick up the __9__. The ladybugs are inside.

5	6	7	8	9
____ plants	____ farmers	____ plants	____ trees	____ ladybug
____ ladybugs	____ gardens	____ ladybugs	____ sheets	____ trees
____ bugs	____ grocers	____ farmers	____ plants	____ plants
____ ladies	____ housewives	____ quietly	____ grass	____ sheets

---

Two million tons of coal burned every minute would not equal the __10__ that the Gulf Stream gives forth in its Atlantic crossing. Without the Stream's warmth England's pleasant green countryside would be as cold as Labrador, which is no farther north than England. If this "river of blue" were cooled as much as fifteen __11__, England, Scandinavia, Northern France, and Germany would probably become a region for the __12__ only.

10	11	12
____ heat	____ inches	____ heat
____ cold	____ degrees	____ trees
____ water	____ months	____ water
____ river	____ tons	____ Eskimos

My interest in octopuses started a few years ago in Palm Beach. I watched a pair of __13__ in two six-foot tanks at the Marine Biological Laboratory. With their tentacles __14__ they were a couple of feet across. I was fascinated by the way they moved about, their miraculous way of changing color, the way they caught little crabs with a sudden flip of their __15__, and by their almost human eyes that seemed amazingly intelligent.

13	14	15
____glasses	_____off	_____tentacles
_____fish	_____extended	_____hands
_____they	_____invented	_____feet
_____them	_____arms	_____tails

Spiders, though not generally popular, are true friends of man, and scientists believe that human life could not survive without them. For a spider's life is devoted to snaring and devouring insects which might otherwise __16__ and desolate the earth. It has been estimated that each year the spiders in England and Wales destroy __17__ more than equal in weight to the entire population of that area.

16	17
_____multiply	_____webs
_____divide	_____plants
_____fly	_____animals
_____arrive	_____insects

Among the most colorful sights in London are the soldiers in scarlet tunics and tall bearskin hats who do __18__ duty outside Buckingham Palace and other royal __19__. The Brigade of Guards is an example of spit-and-polish, parade-ground perfection. But though they exhibit the elegance of musical comedy soldiers, the Guards in time of war are chosen for some of the toughest frontline fighting jobs. Since 1660 they have taken part in almost every great campaign the British have fought. For three __20__ the Guards' tradition of iron discipline has been a force in molding British character. Even under appalling __21__, they have __22__ set an example of flawless discipline.

18

____ sightseeing
____ combat
____ aviation
____ sentry

19

____ carriages
____ ceremonies
____ residences
____ relatives

20

____ hundred
____ centuries
____ decades
____ years

21

____ conduct
____ requests
____ conditions
____ selection

22

____ never
____ sometimes
____ then
____ always

The history of the protozoa, as microbiologist Roman Vishnaic tells it, started with the formation of the earth, a process that scientists estimate began three or four million years ago. A whirling ball of gases torn from the sun gradually solidified into a pattern that placed the heaviest elements of our present chemical scale centrally and worked out to the __23__, principally hydrogen and oxygen, the components of water; these intermingled and rose in blankets of __24__ many miles high. On the __25__ surface the continental platforms floated into place; the global covering gradually hardened and cooled so that it could receive the vaporous layer's endless precipitation as water instead of reconverting it instantly to steam and sending it aloft again. When this happened, the heavy clouds, piled on each other mile after lofty mile, loosed their burdens like weary sponges; the skies were cleared by __26__ that lasted centuries, filling the ocean beds. All this for protozoa, Vishnaic says happily, for life began in the __27__.

23

____ heaviest
____ lightest
____ weakest
____ darkest

24

____ wool
____ air
____ heat
____ clouds

25

____ sun's
____ earth's
____ moon's
____ river's

26

____ clouds
____ sunshine
____ rain
____ mist

27

____ sky
____ universe
____ sea
____ air

NAME _____

MATH SKILLS INVENTORY MUS 1 Form A

INSTRUCTIONS:

On the next three pages there are 30 problems. The way you work these problems shows the best place for you to start work in the Job Corps Math Program. Very few people answer every problem correctly, so don't worry if you can't do every one. You have 25 minutes to work the problems. The problems on page 1 count 5 points, the problems on page 2 count 3 points, and the problems on page 3 count 2 points.

STEPS TO FOLLOW

1. Pull the PROBLEM FORM apart from the ANSWER FORM.
2. Use the PROBLEM FORM as scratch paper to figure out the problem.
3. After you work a problem, find the answer on the ANSWER FORM.
4. Mark the circle next to the right answer, like this ⊘. The right answer is always given, so if you cannot find your answer, do the problem again.

Look at sample A which has been worked: 6+3=9. On the ANSWER FORM the circle next to the right answer is marked like this ⊘. Try sample B yourself. If you marked the circle next to the answer 10 like this ⊘, you were right.

PROBLEMS	
Sample A 6 +3 9	Sample B 2 X 5 = □

ANSWER FORM	
A	B
○ 8	○ 3
○ 3	○ 10
⊘ 9	○ 5
○ 10	○ 7

IMPORTANT! If you mark the wrong answer, here is what to do. To cancel a wrong answer, make the ⊘ mark into an ⊗ mark. After you cancel the wrong answer by making it into an X, then mark your new choice in the regular way.

1

$42 + 23 = \square$

2

$$\begin{array}{r} 491 \\ 24{,}208 \\ 6 \\ +\quad 41 \\ \hline \end{array}$$

3

$$\begin{array}{r} 79 \\ -\ 33 \\ \hline \end{array}$$

4

$26{,}004 - 3{,}290 = \square$

5

$63 \times 6 = \square$

6

$$\begin{array}{r} 7{,}403 \\ \times\quad 39 \\ \hline \end{array}$$

7

John has put 135 dollars in the bank each month for the last six months. How much money does John have in the bank now?

8

$7 \overline{)\ 2{,}415}$

9

$3{,}609 \div 34 = \square$

10

Raiford drove his car 874 miles on 46 gallons of gas. How many miles did he get for each gallon?

Continued on next page

11

$\frac{2}{3} + \frac{1}{2} = \square$

12

$$\begin{array}{r} 8 \\ -\ 5\ \frac{1}{4} \\ \hline \end{array}$$

13

$2\ \frac{7}{8} \times \frac{2}{3} = \square$

14

$24 \div \frac{1}{4} = \square$

15

There are 48 people in a college math class. $\frac{3}{4}$ of them can do this problem. How many can do it?

16

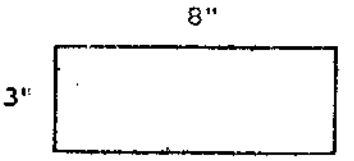
If Chico can run 1 mile in $5\ \frac{1}{2}$ minutes, how many miles can he run in $19\ \frac{1}{4}$ minutes?

17

$$\begin{array}{r} 3\text{ ft }\ 7\text{ in} \\ +\ 2\text{ ft }\ 8\text{ in} \\ \hline \end{array}$$

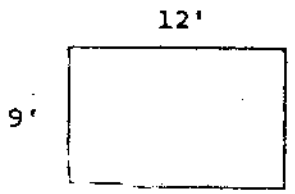
18

The perimeter of this rectangle is____



19

What is the area of this floor?



20

$$\begin{array}{r} 6\text{ lbs }\ 3\text{ oz} \\ -\ 2\text{ lbs }\ 7\text{ oz} \\ \hline \end{array}$$

Continued on next page

21

$56.3 + 7.69 = \square$

22

$162.78 - 81.9 = \square$

23

$78.9 \times .42 = \square$

24

$.52 \overline{)\ 17.68}$

25

Write $\frac{13}{32}$ as a decimal; round your answer to the nearest hundredth.

26

86% of 450 $= \square$

27

30% of _____ is 15

28

283 is _____% of 451. Round your answer to the nearest whole percent.

29

The regular price of that motorcycle is $895.00. It is sold at a 15% discount. What is the sale price?

30

Johnson's Used Car Lots sold 750 cars last year. 123 of them had to be fixed during the year. What percent had to be fixed? Report your answer to the nearest tenth of a percent.

NAME _____ by making it into an ⊠

Page 1

1	2
○ 21	○ 24,646
○ 75	○ 24,746
○ 65	○ 24,736
○ 19	○ 24,856

3	4
○ 36	○ 22,714
○ 112	○ 22,814
○ 56	○ 23,714
○ 46	○ 22,715

5	6
○ 378	○ 288,617
○ 3,618	○ 268,717
○ 368	○ 83,836
○ 396	○ 388,718

7	8
○ 820 dollars	○ 344
○ 141 dollars	○ 345
○ 810 dollars	○ 335
○ 780 dollars	○ 245

9	10
○ 206	○ 18
○ 116 r 9	○ 46
○ 180 r 5	○ 19
○ r 5	○ 17

Page 2

11	12
○ $\frac{3}{5}$	○ $2\frac{3}{4}$
○ $1\frac{1}{3}$	○ $2\frac{1}{4}$
○ $\frac{5}{6}$	○ $3\frac{3}{4}$
○ $1\frac{1}{6}$	○ $2\frac{1}{2}$

13	14
○ $1\frac{11}{12}$	○ 6
○ $1\frac{5}{6}$	○ 92
○ $\frac{11}{12}$	○ 84
○ $4\frac{4}{16}$	○ 96

15	16
○ 64	○ $3\frac{1}{4}$
○ 24	○ 4
○ 30	○ $3\frac{3}{4}$
○ 36	○ $3\frac{1}{2}$

17	18
○ 5 ft 14 in	○ 24"
○ 1 ft 1 in	○ 22"
○ 6 ft 5 in	○ 24 sq in
○ 6 ft 3 in	○ 11"

19	20
○ 98 sq ft	○ 3 lbs 12 oz
○ 42'	○ 8 lbs 11 oz
○ 108 sq ft	○ 3 lbs 6 oz
○ 106 sq ft	○ 4 lbs 12 oz

Page 3

21	22
○ 639.0	○ 80.88
○ 63.99	○ 154.59
○ 133.2	○ 81.88
○ 62.99	○ 80.78

23	24
○ 33.038	○ .34
○ 331.38	○ 3.4
○ 33.138	○ 34
○ 33.126	○ .36

25	26
○ .41	○ 387
○ .4	○ 38.7
○ .406	○ 367
○ 4.1	○ 397

27	28
○ 60	○ 63%
○ 4.5	○ 62%
○ 50	○ 28.3%
○ 45	○ 16%

29	30
○ $134.25	○ 16.5%
○ $750.00	○ 6.1%
○ $760.75	○ 16%
○ $880.00	○ 16.4%

U.S. DEPARTMENT OF LABOR
MANPOWER ADMINISTRATION
555 GRIFFIN SQUARE BUILDING
GRIFFIN AND YOUNG STREETS
DALLAS, TEXAS 75202

6 MGJ

100

November 11, 1975

APPENDIX C

Dr. George S. Kadera
Center Director
McKinney Job Corps Center for Women
P. O. Box 750
McKinney, Texas 75069

Re: JCC 48-5-0002
Research Study

Dear Dr. Kadera:

In reference to your letter of October 28, 1975, approval, with concurrence from Job Corps Headquarters, is given for Mr. Armit Lall to conduct a study at the McKinney Center. The purpose of the study will be to identify the academic and psychological differences, if any, between CAT I, and non-graduates CAT's II and III and CAT III's who leave the center before thirty days.

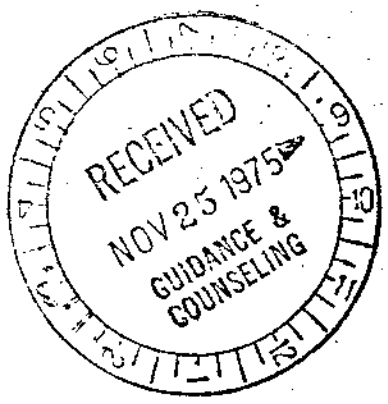
The research shall be conducted according to the Federal Regulations as outlined on Page 50829, Section 97a.96, parts (e) and (f). All corpsmember participation shall be voluntary.

Copies of the findings are to be furnished to the National and Regional Job Corps offices.

If you or Mr. Armit have any questions reference this approval, please let me know.

Sincerely,

Glenn T. Hardison
GLENN T. HARDISON
ARMA for Job Corps



BIBLIOGRAPHY

Books

Bartocci, P. A., "The Psychological Self, the Ego, and Personality," in D. E. Hamacheck, editor, The Self in Growth, Teaching and Learning, Englewood Cliffs, Prentice-Hall, Inc., 1965, pp. 14-26.

Freud, Sigmond, The Problem of Anxiety, New York, Horton, 1936.

Goddard, J. M., "Opportunity for the Culturally Distinct Student," in Agony and Promise, G. Kerry Smith, San Francisco, Jossey-Bass, Inc., 1969.

Lecky, P., Self-Consistency, New York, Island Press, 1951.

Riessman, F., Blue Print for Disadvantaged, B'nai B'rith, New York, Anti-Defamation League, 1968.

Sarason, et al., Anxiety in Elementary School Children, New York, John Wiley, 1960.

Scheffe, H., "A Method for Judging All Contrasts in Analysis of Variance," Biometrika, 40 (1953), 87-104.

Winer, J. B., Statistical Principles in Experimental Design, New York, McGraw-Hill Book Co., 1962.

Articles

Berry, Gordon L., "Self-Concept and Need Factors of Inner-City High School Adolescent and Dropouts," Child Study Journal, 4 (1974), 21-31.

Cuppen, I. W., "Intelligence, Motivation and Anxiety, Determinants of School Achievement in Secondary Education," University of Nijmegen, Netherland.

Brittain, Clay V., "A Comparison of Rural and Urban Adolescents with Respect to Peer vs. Parental Compliance," Adolescence, 4 (1969), 59-68.

Dai, B., "Some Problems of Personality Development Among Negro Children," in C. Kluckhohn and H. A. Murry, editors, Personality in Nature, Society and Culture, New York, Alfred A. Knopf, 1954.

Davidson, H. H. and G. Lang, "Children's Perception of Their Teachers' Feelings Toward Them Related to Self-Perception, School, Achievement, and Behavior," Journal of Experimental Education, 29 (1960), 107-118.

Doyle, G. T. and R. J. Friedman, "Anxiety in Children: Some Observations for the School Psychologist," Psychology in the Schools, 11 (April, 1974), 161-164.

Estes, W. K. and B. F. Skinner, "Some Quantitative Properties of Anxiety," Journal of Experimental Psychology, 29 (1941), 390-400.

Frost, Barry P., "Anxiety and Educational Achievement," British Journal of Educational Psychology, 38 (1968), 293-301.

Gillham, Isabel, "Self-Concept and Reading," Reading Teacher, 21 (1967), 270-273.

Hawk, J., "Self-Concepts of the Socially Disadvantaged," Elementary School Journal, 67 (Jan., 1967), 196-206.

Healey, Gary W. and Richard R. DeBlassie, "A Comparison of Negro, Anglo, and Spanish-American Adolescents' Self-Concept," Adolescence, 9 (1974), 15-24.

Korman, A. K., "Self-Esteem as a Moderator of the Relationship between Self-Perceived Abilities and Vocational Choice," Journal of Applied Psychology, 51 (1967), 65-67.

Krugman, M., "The Culturally Deprived Child in School," National Education Association Journal, 50 (April, 1961), 22-23.

Lohnes, Paul R. and Marian Gary, "Intellectual Development and the Cooperative Reading Studies," Reading Research Quarterly, 8 (February, 1972), 52-61.

Musa, Kathleen and Mary E. Roach, "Adolescent Appearance and Self-Concept," Adolescence, 8 (Fall, 1973), 385-394.

Newman, Annabel, "Later Achievement Study of Pupils Underachieving in Reading in the First Grade," Reading Research Quarterly, 7 (September, 1972), 477-508.

Page, E. B., "Teacher Comments and Student Performance, A Seventy-Four Classroom Experiment in School Motivation," Journal of Educational Psychology, 49 (August, 1958), 173-181.

Paussaint, Alvin F. and Carolyn D. Atkinson, "Negro Youth and Psychological Motivation," Journal of Negro Education, 37 (Summer, 1968), 241-251.

Pruitt, A. S., "Black Poor at White Colleges--Personal Growth Goals," The Journal of College Student Personnel, (January, 1970), 3-7.

Resnick, Harvey, M. L. Fauble, and Samuel Osipow, "Vocational Crystalization and Self-Esteem in College Students," Journal of Counseling Psychology, 17 (1970), 465-469.

Sinha, N. C., "A Study of The Relationship Between Manifest Anxiety and Scholastic Achievement," Journal of the Indian Academy of Applied Psychology, 9 (1972), 65-67.

Taylor, Janet A., "A Personality Scale of Manifest Anxiety," Journal of Abnormal and Social Psychology, 48 (1953), 285-290.

Thomburg, Hershel D., "An Investigation of a Dropout Program Among Arizona's Minority Youth," Education, 94 (Feb., 1974), 249-265.

Tseng, M. S., "Locus of Control As a Determinant of Job Proficiency, Employability, and Training Satisfaction of Vocational Rehabilitation Clients," Journal of Counseling Psychology, 17 (1970), 487-491.

Williams, Robert L., "Personality, Ability, and Achievement Correlates of Scholastic Attitudes," Journal of Educational Research, 63 (May/June, 1970), 401-403.

Ziekel, P. A., "Self-Concept and the Disadvantaged of Ethnic Group Membership and Mixture," Review of Educational Research, 41 (Jan., 1971), 211-225.

Test Manuals

Fitts, W. H., Tennessee Self-Concept Scale Manual, Counselor Recordings and Tests, 1965.

Job Corps Mathematics Program Manual; Manpower Administration, United States Department of Labor, 1973.

Job Corps Reading Manual; Manpower Administration, United States Department of Labor, 1974.

Mooney, Ross L., Mooney Problem Check List Manual, 1950 Revisions, The Psychological Corporation, New York, 1950.

Reports

Combs, A. W., editor, Perceiving, Behaving, Becoming, Washington: Association for Supervision and Curriculum Development, 1962.

"Characteristics of Urban Enrollees Entering Job Corps," Longitudinal Manpower Evaluation Studies, United States Department of Labor, Manpower Administration, U. S. Government Printing Office, 1973.

Gloege, William P., Evaluation of Project 44, The Job Corps Capital Center, American Institute for Research Report No. R66-13, p. 37.

A Job Corps Study of Relative Cost Benefits, 2 vols., Washington, D. C., Software Systems, Inc., 1971.

Leaving the Future Open--Job Corps the First Decade, United States Department of Labor, Manpower Administration, U. S. Government Printing Office, 1974.

Mangieri, John N. and Henry D. Olsen, "The Effect of Reading Ability on Self-Concept of Academic Ability of College Students," Paper presented at meeting of the American Educational Research Association, Washington, D. C., March 30-April 3, 1975.

Manpower Administration, "Characteristics of Urban Enrollees Entering the Job Corps," Longitudinal Manpower Evaluation Studies, United States Department of Labor, 1973.

Manpower Program, "The Federal Government and Manpower," Critical look at MDTA and Job Corps Program, United States Department of Labor, 1974.

Manpower Report of the President, Transmitted to the Congress, April, 1974, United States Government Printing Office, Washington, D. C.

Morgan, G. D., "The Ghetto College Student, A Descriptive Essay on College Youth from the Inner City," American Colleges Testing Program, Iowa City, 1970.

Ryan, Charles W.,"The Poland Spring Story," American Association of Colleges for Teachers Education, 1970.

Unpublished Materials

Engleman, S. R., "An Economic Analysis of Job Corps, Race and Age Groups, Race and Religious Groups," Observations of Industrial Relations, Berkley, California, California University, 1974.

Lee, D. L. et al., "The California State Los Angeles Chicano Student," Educational Opportunity Program, California State College, Los Angeles, California, 1971.

Lloyd, Dee Norman, "Reading Achievement and Its Relation to Academic Performance, Part I, Reading Differences in Elementary School--Relationship to Secondary School Performance, unpublished doctoral dissertation, National Institute of Health, Bethesida, Md., March, 1969.

Neufeld, Allen K., "Differences in Personality Characteristics Between Groups Being High and Low Math Achievement Gain Under Individual Instruction," unpublished doctoral dissertation, Wisconsin University, Madison, Wisconsin, 1967.