AN EXPERIMENTAL INVESTIGATION OF THE RELATIONSHIP BETWEEN SELF-ESTEEM AND ACADEMIC ACHIEVEMENT IN A POPULATION OF DISADVANTAGED ADULTS

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This is to certify that the

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ABSTRACT

AN EXPERIMENTAL INVESTIGATION OF THE RELATIONSHIP BETWEEN SELF-ESTEEM AND ACADEMIC ACHIEVEMENT IN A POPULATION OF DISADVANTAGED ADULTS

By

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This study treated two primary questions. First, is it possible to influence the self-esteem of disadvantaged adult students through group guidance experiences? Second, to what degree and in what way is the academic achievement of these students influenced as self-esteem is modified?

The population for this study consisted of 59 disadvantaged Negro women who were students in a clerical training program at the McNamara Skills Center in Detroit, Michigan. A simple experimental design involving two experimental and two control groups was chosen. A ten week group guidance experience was provided for the experimental groups. Pre and post-test measurements of self-esteem were obtained using the standardized Tennessee Self Concept Scale and a self-esteem inventory which was designed by the researcher. Academic achievement was measured using the language and arithmetic achievement sub-tests of the Iowa Test of Basic Skills.

The project was designed to investigate experimentally two principal hypotheses basic to self-concept theory. Six secondary hypotheses which formed the basis for the assumptions of this thesis were also tested.

The first primary hypothesis predicted that the self-esteem of disadvantaged adult students could be positively influenced through group guidance experiences. Analyses of the data indicated that although the magnitude of change was not statistically significant at the .05 level, the group guidance experience appeared to exert a negative influence on the self-esteem of the guided group.

The second primary hypothesis predicted that increases in academic achievement would be associated with increases in self-esteem. A positive relationship between self-esteem and academic achievement was identified. Students who gained in self-esteem demonstrated similar gains in academic achievement. The negative influence upon the self-esteem of some students was also reflected in their lesser advance in academic achievement.

Analyses of data to test six secondary hypotheses found a positive relationship between self-esteem and academic achievement in the population of disadvantaged adult students.

Dropouts from the non-guided groups were found to have lower self-esteem than those students who remained

in the program. The magnitude of difference was not statistically significant. Language achievement of the dropouts was significantly lower than the achievement of those students who remained in the program.

Day students were found to have higher self-esteem than evening students.

It was predicted that the population of disadvantaged adult students in this study would score lower in self-esteem than a normal population. This hypothesis was not supported.

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CHAPTER I

PRESENTATION OF THE PROBLEM

Following an introduction, the need and the purpose of this study will be described in this chapter. Specific terms will be defined and the hypotheses, the research design, and the significance of this study will be very briefly introduced.

Introduction

Problems concerning differences in academic achievement have been confronting educators for a long time. Assuming that achievement was primarily a function of motivation, and that motivation was largely a matter of discipline, generations of educators have employed the physical and psychological techniques of the hickory stick, the reprimand and the dunce cap as solutions to problems of academic underachievement.

Looking beyond motivation as the solution to all problems of achievement, educators in increasing numbers turned their attention to the factor of intelligence. Perhaps some students could not learn because they had insufficient intelligence. While this proposition provided some answers to some problems of academic

underachievement, it failed to satisfactorily explain the general nature of underachievement.

Educational psychologists continued to ponder achievement problems. Using the stimulus-response theory of learning, they demonstrated that reward and reenforcement were more effective in promoting learning than were punishment and humiliation. Much of the stimulus-response experimentation concerning the effects of motivation on achievement was conducted using laboratory animals. Attempts to confirm these research findings in classrooms and controlled experiments with humans raised serious doubts concerning the adequacy of S-R theory in explaining human learning.

Inspired by Kurt Lewin, field theorists moved beyond simple S-R explanations of learning and perceived it as the result of interaction of the individual and his environment. Educational research was extended and stimulated by Lewin's work, and by the contributions of many others, including Kohler's work in Gestalt learning psychology, and Freud's emphasis on emotion in learning.

Beginning in the 1930s, some psychologists, influenced by the earlier writings and thinking of James,[1]

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[1]William James, Principles of Psychology (1950 ed.; New York: Henry Holt and Co., 1890).

Cooley,[1] and Mead,[2] began to postulate that individual self-perception had a marked effect upon learning behavior and achievement. Murray, Rogers and Snygg, among others, generally held that psychological capacity continued to grow, that this growth was continually being influenced by experience, and that self-perception was a factor involved in this process. Since an individual could only see himself in terms of his experience, and in terms of the treatment he receives from others, the perception of self was seen to be continually evolving and directly related to the perception of experience. Self-perception was seen to function as a limiting factor in academic achievement. Snygg and Combs posited that a poor self-image had a damaging effect on learning.[3] This relationship between self-perception and academic achievement is an underlying assumption for the research described in this thesis.

Need for this Study

There is need for research and theory development on the adult learning process. Since learning is

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[1]Charles H. Cooley, Human Nature and the Social Order (1922 ed.; New York: Scribner's Sons, 1902).

[2]George H. Mead, Mind, Self and Society (Chicago: University of Chicago Press, 1934).

[3]Donald Snygg and Arthur Combs, Individual Behavior (New York: Harper & Row, 1949).

recognized as a continuing process throughout the entire span of life, it is important to understand and to explain the many aspects of adult learning.

The national concern for the education of disadvantaged adults provides the general background for this study. It is widely assumed that education is one of the major weapons in the war against poverty. In order for education to be effectively used to combat poverty, our understanding of the learning process of the economically, culturally and educationally disadvantaged adult must be greatly extended. Such extended understanding could form the foundation of much more effective educational programs which seek to promote academic achievement for students who have failed to achieve, and to change the attitudes of the poor from dependency to self-sufficiency. These programs must be directed toward the individual student and must effectively relate to the internalized conditions which inhibit or enhance his learning. One of these conditions is assumed to be self-esteem.

Empirical research findings have been reported on the relationship of self-esteem to academic achievement at the primary and secondary levels of education. A specific need exists to investigate this relationship using a population of economically and culturally disadvantaged adult students.

Purpose of this Study

The purpose of this study is to investigate the possibility of influencing self-esteem by the employment of group guidance, and to examine the relationship between self-esteem thus influenced and academic achievement. The population includes a group of economically and culturally disadvantaged adults involved in a clerical training program at the McNamara Skills Center, Detroit, Michigan. The study is designed to investigate the effect of group guidance upon individual self-esteem, and of self-esteem upon academic achievement of persons receiving formal instruction in the disciplines of English and arithmetic.

Definitions

1. Self-concept--a global image of self which includes all relationships and attitudes which the individual has distinguished as being fairly stable and characteristic of himself.

2. Self-esteem--the estimate of worth which each individual makes of himself.

a. High self-esteem means "that the individual respects himself, considers himself worthy."[1]

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[1]Morris Rosenberg, Society and the Adolescent Self-Image (Princeton, N.J.: Princeton University Press, 1965), p. 31.

b. Low self-esteem "implies self-rejection, self-dissatisfaction, self-contempt."[1]

3. Culturally disadvantaged--members of lower socio-economic groups who have insufficient educational background and occupational preparation to satisfactorily compete for jobs, homes and status.

4. Economically disadvantaged--impoverished members of lower socio-economic groups characterized by prolonged periods of unemployment and yearly incomes which fall below minimum income standards established by the Office of Economic Opportunity.

5. Academic achievement--mastery of the school disciplines, limited in this study to English and arithmetic.

6. Tennessee Self Concept Scale--TSCS is a standardized, multi-dimensional instrument for measuring self-concept. It was designed by William H. Fitts and published by Counselor Recordings and Tests, Nashville, Tennessee. It was used in this study to provide one measure of self-esteem.

7. Concentrated Employment Project--CEP is the name given to a thirty-three week training effort at the McNamara Skills Center, Detroit, Michigan. It was designed to train culturally and economically disadvantaged students

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[1] Ibid.

for entry positions in the general clerical field. Students received instruction in typing, general office machines, record-keeping, bookkeeping, English and arithmetic for seven hours each day, five days each week.

8. Clerical trainees--adult students enrolled in the CEP at the McNamara Skills Center.

9. Group Guidance--a program adapted to the CEP in order to complete the design of this research project. The goal of the guidance program was to promote self-understanding and self-esteem. The program utilized both large and small group procedures. The guidance program included the following topics: understanding of self and others, grooming, development of positive employment attitudes, and job orientation.

Hypotheses

Several postulates of symbolic interaction theory are basic to this study. They are:

1. The individual's self-concept is based on his perception of the way others are responding to him.[1]
2. The individual's self-concept functions to direct his behavior.[2]

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[1] John W. Kinch, "A Formalized Theory of the Self Concept," The American Journal of Sociology, LXVII (May 1963), p. 482.

[2] Ibid.

3. The self-concept is learned. What is learned can be taught.[1]

Stated in the if-then paradigm, these postulates form the logical basis for the development of the hypotheses of this study.

If 1. the individual's self-concept functions to influence his learning behavior,

And, if 2. self-esteem is an estimate of worth that each individual makes of himself which is drawn from the global image of self identified as the self-concept,

And, if 3. the self-concept is learned and can be influenced through educational experiences,

And, if 4. a significant educational experience is afforded as one perceives the way others are responding to him,

Then, 5. it should be possible to influence self-concept and hence self-esteem and to effect a significant change in learning behavior by providing intensive group guidance.

The primary hypotheses of this thesis are:

H_1 The self-esteem of disadvantaged adults can be positively influenced through intensive group guidance efforts.

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[1] A.S.C.D. Yearbook, Perceiving, Behaving, Becoming: A New Focus (Washington: Association for Supervision and Curriculum Development, 1962). p. 101.

H_2 Academic achievement can be influenced through group guidance experiences which accompany formal instruction, and which increase individual self-esteem.

Research Design

A simple experimental design was chosen to test the hypotheses stated above. The fifty-nine students in the CEP program were randomly assigned to experimental and to control groups. In addition to instruction on the regular CEP curriculum, the experimental groups received fifty hours of group guidance experiences designed to enhance self-esteem. Students in the control groups received the regular CEP instruction without the group guidance experience. Pre and post-test measurements of self-esteem and academic achievement were taken, and the data were statistically analyzed using an analysis of covariance and partial correlations.

Six secondary hypotheses were also tested.

Significance of this Study

If it can be demonstrated experimentally that an adult student's self-esteem can be modified through group guidance experiences and that such modification results in changes in academic achievement, these findings will be directly relevant for all those involved in the education of disadvantaged adults.

Secondly, there are implications in this study which may be relevant to all levels of education. If it can be demonstrated that group guidance techniques are effective in raising self-esteem, and that the higher self-esteem is followed by increases in academic achievement, the study might then have significance for those concerned with the problems of the youthful underachiever.

Overview of the Thesis

Chapter I included an introduction to the problem, the need for and the purpose of the study, and definitions of specific terms used in the study. The hypotheses, research design, and significance of the study are followed by an overview of the thesis.

In Chapter II, literature relevant to the study of self-concept and self-esteem is reviewed. This is followed by a review of literature relating self-esteem and academic achievement, a report of studies pertinent to the learning problems of disadvantaged adults, and research directed toward influencing self-esteem through group techniques. A summary concludes the chapter.

In Chapter III the population and the setting of the study are described.

Chapter IV details the determination of the experimental groups, the primary hypotheses and the secondary hypotheses, the development and selection of instruments,

the experimental procedures, and the analysis procedure. A summation is included.

In Chapter V the data and the findings pertinent to the hypotheses of this study are presented. A summary of the findings and conclusions is included.

Chapter VI includes a final summarization of the thesis, conclusions, and suggestions for further research.

CHAPTER II

REVIEW OF THE LITERATURE

Related literature is reviewed in this chapter in four separate sections: the basic theory of self-concept and self-esteem, research findings relating self-esteem and academic achievement, studies pertinent to the learning problems of disadvantaged adults, and findings from experiments directed toward influencing self-esteem through group techniques.

Self-Concept and Self-Esteem

The work of George Mead forms the theoretical foundation for this study. Mead[1] provided the fundamental thinking for symbolic interaction theory which has been stated as:

> The individual's conception of himself emerges from social interaction and, in turn, guides or influences the behavior of that individual.[2]

Mead pondered the impact of society upon the mind and the self and explained their development in terms of

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[1]Mead, op. cit.

[2]Kinch, op. cit., p. 481.

social interaction. He reasoned that social experience is prior to the existence of the mind and serves to shape its development:

> Mind arises through communication by a conversation of gestures in a social process or context of experience - not communication through mind.[1]

Since the process of thinking is "the internalized conversation of gestures," Mead reasoned that man cannot possibly internalize those systems of symbols with which he has had no contact: hence, man's thinking is largely determined by his experiential background. Thinking, then is the result of ability to interact symbolically within the range of his perception of his experience.

In discussing the development of the self, Mead similarly states:

> The self is something which has a development; it is not initially there, at birth, but arises in the process of social experience and activity, that is, develops in the given individual as a result of his relations to that process as a whole and to other individuals within that process.[2]

Mead speaks of the influence of society in terms of the "generalized others." Those "generalized others" who have the greatest influence on the development of the self are termed "reference groups." Individuals of particular significance have been defined as "significant others." Since all people do not have identical

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[1]Mead, op. cit., p. 50. [2]Ibid., p. 135.

developmental experiences, and similar generalized or significant others, they perceive neither identical experiences nor identical conversations in exactly the same manner.

Kinch, examining the social interaction theory, formalized several basic postulates, two of which are central to the subject of this investigation.

1. The individual's self-concept is based on his perception of the way others are responding to him.
2. The individual's self-concept functions to direct his behavior.[1]

A third basic postulate can be formulated from position papers written by Kelley, Rogers, Maslow and Combs. They assert that:

> The self is learned. What is learned can be taught. What can be taught is fair game for the public schools. The question is not one of whether we approve of teaching for a positive self in the public schools. We could not avoid affecting the self if we wanted to. We may ignore the self in our teaching. We cannot, however, escape the fact of our influence upon the self or our ultimate responsibility with respect to whether the effects of schooling are positive or negative.[2]

3. The self is learned and can be influenced through the educational process.

The distinction between the terms self-concept and self-esteem is not clearly distinguished in the literature.

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[1]Kinch, op. cit., p. 481.

[2]A.S.C.D. Yearbook, op. cit., p. 101.

Johnson, in a perceptive discussion of the two terms, observes:

> Self-concepts, self-images, self-pictures are perceived as objects by the person's self. In and of themselves they are not "high" or "low," "adequate" or "inadequate" to the self until a valuation is placed on them. The high-low, adequate-inadequate valuations are the result of a valuing process, self-esteeming. Self-esteeming is thus seen as an important intervening variable between the Gestalt of an individual's background experiences and significant persons and his self-concept.[1]

Johnson concludes:

> Self-esteem is viewed as one of the elements of the self-configuration which results from positive or negative self-valuing with the goals and ideals of the person as a standard of reference.[2]

The valuing process inherent in the concept of self-esteem was observed by James, who defined the term using the following formula: "Self-esteem = $\frac{\text{Success}}{\text{Pretensions}}$."[3] By equating self-esteem to a relationship between individual estimates of success and an individual sense of pride or egotism, James precisely described this process.

Rosenberg also refers to this valuing process in his definition of self-esteem. He defined self-esteem as "a positive or negative attitude toward a particular object,

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[1]Robert E. Johnson, "A Study of the Self-Esteem and Related Background Factors of New Reformatory Inmates" (unpublished Ph.D. dissertation, Michigan State University, 1968), p. 25.

[2]Ibid., p. 20.

[3]James, op. cit., pp. 310-11.

namely the self."[1] In describing the valuing process which results in high and low self-esteem, Rosenberg states: "High self-esteem exists when the individual respects himself, considers himself worthy. Low self-esteem, on the other hand implies self-rejection, self-dissatisfaction and self-contempt."[2]

Brookover also recognized the valuing process in developing his concept of the "self-concept of academic ability."

> Self-concept of academic ability refers to behavior in which one indicates to himself (publicly or privately) his ability to achieve in academic tasks as compared with others engaged in the same task. We perceive of self-concept of academic ability as only one of many concepts of self. Other concepts of self refer to other areas of behavior which may vary from that involving school performance.[3]

Brookover's definition of the self-concept of academic ability is highly compatible with the definition of self-esteem used in this thesis.

In reviewing the literature, research studies which accept the premise of the valuing process in describing the self will be considered as studies in self-esteem. It is recognized that the terminology of some of these studies

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[1]Rosenberg, op. cit., p. 30.

[2]Ibid.

[3]Wilbur Brookover, Edsel Erickson, and Lee Joiner, Self-Concept of Ability and School Achievement III (Cooperative Research Project 2831, U.S. Office of Education, East Lansing: Michigan State University, 1967), p. 8.

may not be entirely consistent with the precise definition of self-esteem used here.

Self-concept and self-esteem have been defined earlier in this thesis as:

Self-concept--a global image of self which includes all relationships and attitudes which the individual has distinguished as being fairly stable and characteristic of himself.[1]

Self-esteem--the estimate of worth which each individual makes of himself.[2]

Self-Esteem and Academic Achievement

One of the problems which an investigator faces when he elects to undertake a research project involving the self is the mass of literature in the field. Wylie, attempting to review and order investigations in the realm of self-concept, was greatly impressed by the "bewildering array of hypotheses, measuring instruments and research designs"[3] which had been used to investigate the field.

Brookover similarly observes:

> Perhaps the best description of a large part of the self-concept literature is that it is verbally

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[1] Rosenberg, op. cit., p. 31.

[2] Ibid.

[3] Ruth Wylie, The Self Concept (Lincoln: University of Nebraska Press, 1961), p. 3.

> redundant or synonymous but nonreplicative. Literally hundreds of studies have been done on self-concept and reported in the educational, sociological, and psychological literature. Yet few of these studies can be replicated because of either poor methodology or unclear conceptualization or usually both.[1]

In reviewing the literature concerned with learning and the self, answers to the following questions will be sought:

1. What is generally known about the relationship between academic achievement and self-esteem?
2. What is specifically known about the relationship between the self-esteem of culturally disadvantaged adults and their patterns of academic achievement in adult training programs?

The most current and exhaustive examination of this relationship was conducted by Brookover, Erickson and Joiner using a population of junior and senior high school students. In a six year longitudinal study of one class as it progressed through grades seven through twelve, Brookover isolated a "self-concept of academic ability" which has already been explained. The project was conducted in three phases. In the third phase, Brookover hypothesized that the self-concept of academic ability was a necessary but not sufficient condition in school achievement. The results of his research tended to confirm the hypothesis. He also hypothesized that self-concept of

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[1]Brookover, op. cit., p. 20.

ability intervenes between the student's perception of the evaluation of his ability by significant others and his achievement in school. He concludes:

> It seems quite clear from these analyses that self-concept of ability makes a significant contribution to the explanation of school achievement as a means through which the evaluation of others are translated into school achievement behavior.[1]

Several other studies were either based on the Brookover project or closely related to it.

Richard Morse investigated "the relationship between classroom learning and self-concept of ability among Negro and Caucasian students in a Midwestern Urban Complex."[2] His findings are summarized in the following statements:

> The relationship between self-concept of ability and grade point average was significantly lower among Negro students than among Caucasian students. The obtained coefficients were .43 for Negroes and .65 for Caucasians.[3]

Despite this lower correlation, Morse found that self-concept of ability was a more accurate predictor of academic achievement than the intelligence scores of Negro students.

> The Negro student's conception of his ability to succeed in school and his motivation to do so apparently provide a better basis for forecasting his school achievement than measures of intelligence.[4]

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[1] Ibid., p. 144.

[2] Ibid., p. 205.

[3] Ibid., p. 208.

[4] Ibid., p. 209.

Kenneth L. Harding, using the same population described in the Brookover study, focused on Caucasian dropouts in an attempt to determine how those who dropped out differed from those who remained in school. His findings included the following:

> Dropouts have significantly lower self-concepts of academic ability than non dropouts when IQ, socio-economic status and grade point ability have been partialled out.[1]

Harding, like Morse, also concluded that self-concept of ability is an important variable in predicting academic behavior. Harding concluded that self-concept of ability was a major factor in predicting whether or not the student will drop out of school prior to graduation.

Two separate 1958 studies by Fielder et al.[2] and Turner and Vanderlape[3] could identify no significant relationship between self-esteem scores and the grade point average of high school students. Similarly, Borislow[4] did not find a clear relationship between academic achievement and the self-evaluation of first semester freshmen at the University of Pennsylvania.

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[1] Ibid., p. 260.

[2] Wylie, op. cit., pp. 224-25.

[3] Ibid.

[4] Bernard Borislow, "Self Evaluation and Academic Achievement," The Self in Growth, Teaching, and Learning ed. by Hamachek (Englewood Cliffs, N.J.: Prentice Hall, 1965), p. 465.

Coopersmith,[1] using a population of 102 fifth and sixth grade students, obtained a partial correlation of plus thirty between the Iowa Achievement Test scores and self-esteem when sociometric status was held constant.

Boroughs examined a group of junior high school students and found support for the hypotheses which predicted "that achieving students would report (1) self-concepts differing in specific aspects from those reported by underachievers, (2) greater self-esteem than underachievers, and (3) more positive attitudes toward environment than underachievers."[2] This study utilized measures of self-esteem obtained through an adaptation of Bills Adjective Scale.[3]

Fink, assuming that low academic achievement was related to factors other than a lack of perseverance, asocial behavior, hostility, brain damage, poor teaching or inadequate school facilities, found a significant positive correlation between "adequate and inadequate" self-concepts and academic achievement. He defined self-concept as "the attitude and feelings that a person has regarding

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[1]Wylie, op. cit., p. 224.

[2]Mary Clare Milligan Boroughs, "Indices of Self and Attitudes Toward Environment in the Perception of Achievement" (unpublished Master's thesis, Michigan State University, 1959).

[3]Robert E. Bills, "An Index of Adjustment and Values," Journal of Counseling Psychology, XV (May 1951), pp. 257-61.

himself."[1] He measured self-concept using a battery of psychological tests and submitted the test data to a panel of judges who identified students with "adequate" and with "inadequate" self-concepts.

On the college level, Clarke[2] found a positive relationship between academic performance and the expectancies held for the students by significant others identified from home and community environments.

Payne[3] constructed and validated an instrument to measure academic self-concept and found that under and overachieving eleventh grade students differed significantly in their self-concepts.

Bodwin[4] found a significant relationship between immature self-concepts and disabilities in reading and arithmetic among elementary school children in Flint, Michigan.

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[1]Martin Fink, "Self-Concept as it Relates to Academic Underachievement," The Self in Growth, Teaching, and Learning ed. by Hamachek, op. cit., p. 486.

[2]William Clarke, "Relationship between College Academic Performance and Expectancies" (unpublished Doctoral dissertation, Michigan State University, 1960).

[3]David Allen Payne, "A Dimension Analysis of the Academic Self-Concept of Eleventh Grade Under and Overachieving Students" (unpublished Doctoral dissertation, Michigan State University, 1957).

[4]Raymond F. Bodwin, "The Relationship between Immature Self-Concept and Certain Educational Disabilities" (unpublished Doctoral dissertation, Michigan State University, 1957).

Reeder[1] found that children with low self-concepts (1) have lower sociometric status, (2) achieve lower in comparison with their potential, and (3) are more frequently classified as having problem behavior than children with high self-concept.

Two experimental studies examined the effects of induced academic failure upon self-esteem. Thorne[2] predicted that subjects with low self-esteem would be inclined to lower their self-evaluation markedly as a result of a stressful experience, whereas subjects with high self-esteem would be less inclined to lower their self-evaluation. Self-esteem was measured initially using Bills Index of Adjustment and Values. Failure was induced, and the Bills Index was readministered in order to determine the effect. The prediction of differential decline in self-evaluation was not substantiated.

Dorleys experimentally tested the following hypotheses:

1. Failure arbitrarily induced during the performance of a simple verbal task will not prevent the learning of this task by high acceptance students.

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[1]Thelma Reeder, "A Study of Some Relationships between the Level of Self-Concept and Academic Achievement and Classroom Adjustment" (unpublished Doctoral dissertation, North Texas State College, 1955).

[2]R. D. Thorne, "The Effects of Experimentally Induced Failure on Self-Expectancies" (unpublished Doctoral dissertation, Columbia University, 1954).

2. Failure arbitrarily induced during the performance of a simple verbal task will prevent the learning of this task by low acceptance students.[1]

Failure was introduced to each group (differing only in self-acceptance) as they worked on a set of anagrams. The findings tended to substantiate both hypotheses.

Morse observed from a preliminary report of a 1964 University of Michigan study using a Coopersmith Self-Esteem Inventory:

> The general impression one gets (from this study) is that for the young child, school is a secure place with regard for mental health, but as he grows older this confidence diminished. While some items (from the scale) tend to stay the same over the grades, many change for the worse. Eighty-four percent of the third graders are proud of their school work, while only fifty-three percent of the eleventh graders are. In the low grades, ninety-three percent feel they are doing the best work they can; only thirty-seven percent of the oldest pupils feel this way. Regardless of their intelligence quotient and the fact that the failures tend to drop out, the pupils who remain in school come to feel that they are doing inadequate work.
>
> In general, the longer we have them, the less favorable things seem to be. . . . The fact remains, if we care about the pupil's self regard we have much to do.[2]

The literature concerning the relationship of academic achievement and self-esteem is neither conclusive nor consistent in reported research findings. While there

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[1]E. J. Dorleys, "The Effects of Experimentally Induced Failure on Verbal Learning as a Function of Self Acceptance" (unpublished Doctoral thesis, University of Missouri, 1957).

[2]W. C. Morse, "Self-Concept Data," National Association of Secondary School Principals Bulletin, XLVIII (September, 1964), pp. 23-7.

is general agreement supporting the basic postulates of symbolic interaction theory, the exact nature of this relationship has not been clearly established. Brookover's research identified self-concept of academic ability as being an intervening variable between the perceived evaluation of a student and his achievement in school. Some studies have attempted to identify a direct linear relationship between self-esteem and academic achievement, and those findings supported the relationship. Other studies which investigated these two variables identified a partial relationship between self-esteem and academic achievement.

The review of literature failed to identify research on the relationship between self-concept or its component, self-esteem, and academic achievement involving a population of culturally and economically disadvantaged adult students.

Learning Problems of Disadvantaged Adults

This section will review research relevant to adult learning and will focus on literature concerning the specific problem of educating disadvantaged adult students. Attention to this phase of the literature was deemed necessary because of problems peculiar to the education of adults and because of the current interest in programs designed to educate the culturally disadvantaged. The following questions will serve to guide the review:

1. Can culturally and economically disadvantaged adults be reeducated?
2. Are current programs involved in the education of culturally and economically disadvantaged adults judged to be serving the educational needs of the poor?
3. What is generally known about the self-esteem of the disadvantaged?

Beginning in 1928 and continuing through the present day, research in the area of adult learning has served to demonstrate that while there are some distinct differences between the learning processes of adults and of children, adults are indeed capable learners.

In his review of the research of adult education, deS. Brunner[1] summarized the work of investigators who have made significant contributions to the understanding of the adult learning process, and whose findings apply particularly to the education of the culturally disadvantaged.

Irving Lorge, using a population of W.P.A. workers, investigated the relationship of age to the performance of adults on rigorously timed aptitude and achievement tests. He found that closely timed tests tend to underestimate adult achievement and aptitude. DeS. Brunner states:

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[1]Edmund deS. Brunner, et al., An Overview of Adult Education Research (Chicago: Adult Education Association, 1959), pp. 1-26.

"Lorge sums up the findings of research in this area effectively when he says: 'Whenever learning ability is measured in terms of power ability--i.e. learning without stringent time limits, the evidence is clear that the learning ability does not change significantly from twenty to sixty years.'"[1]

Houle's analysis of the results of 225,000 participants in the World War II Army Educational Program is reported.[2] Houle found that disadvantaged adults who lacked the basic tools of learning could be taught to achieve them.

Wilkening studied the relationship between indices of socio-economic status and the acceptance of innovation in farm technology. In discussing the research findings, deS. Brunner stated:

> He also showed that some ideas failed of acceptance, i.e. were not functionally learned, because of feelings of economic deprivation and because they were associated with feelings of social isolation from those who attempted to disseminate them. It was also clear that the stronger the cohesiveness and hence influence of neighborhood and kinship groups, the slower was the acceptance of both new practices and new ideas.[3]

Leo Johnson discussed the stimulus-response theory of learning developed by Pavlov and supplemented by Guthrie and Thorndike, and the field theory postulated by Lewin,

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[1] Ibid., p. 13.

[2] Ibid., p. 11.

[3] Ibid., p. 17.

in an attempt to isolate an appropriate learning theory for adult education. He concluded:

> One of the greatest challenges an educator faces is to be able to creatively practice a learning theory. Adult educators are no exception. The challenge still exists. The learning process can be seen in action in work with adults. The learning theory which works best for adult education is field-theory. To apply field-theory in work with adults is a great challenge. We can learn from adult education responses to this challenge.[1]

In his chapter on Adult Learning, deS. Brunner summarized with the following statement:

> . . . In the area of adult education there is an encouraging amount of assumed knowledge. Adults can learn, and given their own time can learn as effectively in later maturity as in earlier adulthood unless physically handicapped . . . While the amount of schooling makes a difference in later learning the educationally disadvantaged can and do learn.[2]

Hendrickson[3] reviewed the research of Lorge, Thorndike, and Wechler and agreed that adult learning ability declines only negligibly with advancing age. Hendrickson cites some advantages to the learning process that are generally characteristic of the adult learner. They are:

1. Increased experience. This enhances wisdom and judgment.

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[1]Leo F. Johnson, "The Learning Process: A Challenge and A Response," Journal of Education, CXLVIII (October, 1965), p. 45.

[2]deS. Brunner, op. cit., pp. 22-3.

[3]Andrew Hendrickson, "Adult Learning and the Adult Learner," Adult Leadership, XIV (February, 1966), pp. 254-56.

2. Adults have fewer goals which permits a greater concentration of activity.

3. Adults are highly motivated.

4. Adults have good work habits.

The above characteristics of the adult learner may be characteristic of the adult learner from middle or higher class socio-economic groups, but it is doubtful that they represent general characteristics of the culturally and educationally disadvantaged adult.

Miller agrees with this point of view:

> Enough evidence is available to show why most adults attend school, but the educationally deficient adult is not like most adults. The problem of trainee motivation among this hard core group is one of the least understood. This group is no monolith. They represent many and varied motives, interests, aptitudes, and abilities. Motives differ among age groups. Vocational motives appeal more to persons between the ages of 20-40 years than to the younger or older individual.[1]

Recognition is generally accorded the position that the process of education of disadvantaged adults requires an understanding of their backgrounds. Derbyshire stated: "Until teachers of disadvantaged adults can view the adult student's world and experiences through his eyes, the educator's teaching will be irrelevant."[2]

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[1]Fredrick E. Miller, "There is a Need for Militancy in Adult Basic Education," Adult Leadership, XVII (June, 1968), pp. 68-70.

[2]R. L. Derbyshire, "The Sociology of Exclusion: Implications for Teaching Adult Illiterates," Adult Education, XVII (Autumn, 1966), p. 3.

Derbyshire[1] also identified the educationally disadvantaged as being members of a minority society which has been culturally excluded from the mainstream of American political and economic participation. These culturally excluded individuals seldom taste the success of achievement which comes through education, financial success, occupational advancement, family status and the like. They are generally "unskilled and unschooled" and more frequently unemployed than employed.

One implicit assumption forming the background of this thesis is that the disadvantaged will report lower self-esteem than other groups in our society. Jean Grambs believes that the self-esteem of the disadvantaged Negro is negatively influenced by both a color-caste complex and economic and cultural deprivation. She states:

> The self-concept of the Negro is contaminated by the central fact that it is based on a color-caste complex. The American color-caste system was evolving at the same time that the brave concepts of the American and French revolutions about human equality were also born. It was thus almost inevitable that the racial situation would cause trouble.[2]

Grambs further states:

> The self-esteem of the Negro is damaged by the overwhelming fact that the world he lives in says, "White is right; black is bad." The impact on the

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[1] Ibid.

[2] Jean D. Grambs, "The Self-Concept: Basis for Reeducation of Negro Youth," in Negro Self-Concept, ed. by Franklin Patterson, et al. (New York: McGraw-Hill, 1965), p. 13.

> Negro community is to overvalue all those traits of appearance that are most Caucasian.[1]

Poverty and an unstable family life also seem to be influential in contributing to a depreciated self-esteem among black people. Quoting again from Grambs:

> The Negro slum child is far more liable than a white slum child to experience also an unstable home. The self that the Negro child learns early in life is one exposed to the most difficult of all situations for the human being to cope with: an inadequate family living on the edge of economic insufficiency.[2]

Grambs also suggests that there is evidence that damage to Negro self-esteem is more marked for boys than it is for girls.

> The damage to the child's self-esteem appears greater for Negro boys than for girls. Though it is debatable whether, in general, it is more or less difficult to grow up as a boy or as a girl in our culture, it seems clear from the evidence that during early childhood and school years, the Negro girl accommodates better to the circumstances of existence. . . . It is highly probable that the trauma suffered by Negro females is passed on (in adult life) and displaced upon the males in the situation.[3]

Rosenberg suggests that self-esteem is related to social status:

> If a person's self-esteem is influenced by what others think of him, then there is reason to expect those with the highest prestige in the society--the upper classes --to be more likely to accept themselves.[4]

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[1] Ibid., p. 15.

[2] Ibid., p. 18.

[3] Ibid., pp. 20-21.

[4] Rosenberg, op. cit., p. 39.

However, Rosenberg observes little differential in self-esteem between Negroes and Caucasians:

> Negroes, who are exposed to the most intense, humiliating, and crippling forms of discrimination in virtually every institutional area, do not have particularly low self-esteem. They are, indeed, below average, but not by a conspicuous margin (only 6 percent).[1]

Hines speaks of the effects of cultural deprivation upon the Negro:

> The social definition of inferiority and its attendant expectations have been major factors contributing to the cultural deprivation of the Negro. He has suffered a form of partial isolation no less real than that experienced by the unwanted and isolated child. The rewards of our society have come to him when he has followed the defined expectations. Psychologically he has tended to be excessively cooperative, submissive, nonverbal, noncompetitive, and withdrawing.[2]

Growing up outside the pale of the American middle class value system, members of the excluded lower classes tend to develop traits of insecurity, physical aggressiveness, apparent lethargy or lack of motivation, low self-esteem, and a tendency toward concrete rather than abstract thinking. Each of these traits creates difficult problems for those charged with designing programs to eliminate illiteracy in the United States.

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[1] Ibid., pp. 56-57.

[2] Ralph H. Hines, "Social Expectations and Cultural Deprivation," in Basic Education for the Disadvantaged Adult: Theory and Practice, ed. by Frank Lanning and Wesley Many (New York: Houghton Mifflin Co., 1966), p. 183.

Haggstrom does not believe that current anti-poverty programs are effective in combating either poverty or illiteracy:

> The new federally supported anti-poverty training programs are products of good intentions, political needs, and a great distance from the lives of the poor. As a result, most persons in the training programs will not have been helped by them. Those who would have secured jobs will do so anyway. But for the most part, trainees will find no jobs waiting for them at the end of the training programs, or will find those jobs with such low pay that the trainees remain poor, or will find only "dead end" jobs which do not lead into careers. . . . Further, there is little concern to educate the poor, but the emphasis is rather to secure jobs on the underside of the economy.[1]

Demonstration projects are beginning to innovate techniques and programs. Passett and Parker reported on a New Jersey project which trained "24 poor people--most of them unemployed or on welfare--to provide educational experience to more than 700 adults living in six urban ghettos of New Jersey."[2] The key to this program was the identification of the needs of the poor through a community survey--conducted as part of the training experience for the aides--and then using the trained aides as recruiters and as teachers in order to reach the adult poverty population which had not been reached by the New Jersey school system.

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[1]Warren C. Haggstrom, "Poverty and Adult Education," Adult Education, XV (Spring, 1965), p. 145.

[2]Barry Passett and Glenn M. Parker, "The Poor Bring Adult Education to the Ghetto," Adult Leadership, XVI (March, 1968), p. 326.

There appears, however, to be more dissatisfaction than gratification with present programs to educate the disadvantaged. Derbyshire states:

> In order to educate the unschooled adult, educational institutions must be responsible for the total person, not only for the formal learning segment of his life. Until now, each institution has declared responsibility for only its segment of the functioning organism. If success is to come where others have failed, exceptional innovations must develop.[1]

Garrett defines the tasks for educators of the culturally deprived:

> There seem to be three important tasks confronting culturally deprived adult education. First there needs to be continuing inquiry, both scientific and philosophical, into the foundations of education for the adult poor; second, a hard core of professionally oriented educators for deprived education needs to be developed; and third, imaginative programs are needed.[2]

Haggstrom calls for new adult education programs, which through the involvement of the poor in social action, will lead to their self-realization. He concludes:

> If one assumes that self-realization is approached through a process of self-responsible and self-directing decision and action, then to draw the poor into action in their own behalf is not merely one form of education, it becomes a theoretically necessary requirement for the effectiveness of educational or training programs.[3]

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[1] Derbyshire, op. cit., p. 9.

[2] P. G. Garrett and U. Nag, "Educating Adults from Culturally and Economically Deprived Environments: A Challenge to Home Economics," Adult Leadership, XIV (February, 1966), p. 261. (Emphasis supplied by author)

[3] Haggstrom, op. cit., p. 154.

In reply to the questions posed at the beginning of this section, it seems reasonable to state in conclusion that:

1. Culturally and educationally disadvantaged adults can learn. However, their learning will be influenced by their age and socio-economic status and by their previous educational experiences. In any group learning situation, hence, achievement levels may vary widely.
2. There is general agreement that racial distinction has an effect on self-esteem. It is also suggested that low self-esteem results from a deprived socio-economic situation.
3. Adult education programs, both past and present, are generally judged as not having met the primary needs of the culturally and economically disadvantaged adult.

Influencing Self-Esteem through Group Techniques

Research in group dynamics has suggested potential for the modification of individual self-esteem. Lewin, Cartright, Zander and others have investigated the nature of group influence on individual judgments, commitments, and behavior.

Lewin[1] concluded that attempts to change individual behavior were more successful if they were framed in the context of group dynamics rather than through direct work with the individual himself.

Levine and Butler[2] concluded from their study that the involvement of members in a discussion group opened the way for exposure to new behavioral patterns.

Cartright and Zander[3] found that group pressures can be directed against the forces of conformity and toward the differentiation of roles of members to encourage creativity.

Bennett concluded:

> Guidance groups can provide many opportunities to broaden information and viewpoints and to strengthen open mindedness, and with good leadership, can increase respect for variation in opinion and prevent the hampering of individual judgments made in the light of varied possibilities.[4]

Research undertaken at Northern Arizona University concerning the counseling of individuals undergoing cultural change suggested that a variety of group processes

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[1]Kurt Lewin, "Frontiers in Group Dynamics," Human Relations, Vol. I (January 1947), pp. 5-42.

[2]Jacob Levine and John Butler, "Lecture vs. Group Decisions," Journal of Applied Psychology, XXXVI (February, 1952), pp. 29-33.

[3]Dorwin Cartright and Alvin Zander, ed., Group Dynamics: Research and Theory (New York: Harper & Row, 1960), p. 183.

[4]Margaret E. Bennett, Guidance and Counseling in Groups, 2nd ed. (New York: McGraw-Hill, 1963), p. 94.

could be employed to facilitate the desired change. These would include:

> . . . such services as classroom learning, group counseling, social gatherings, recreational programs, group work, etc. . . . All such activities must be geared to the level of understanding of the client. They must incorporate past learning with movement toward new goals.[1]

In discussing the role of the counselor in the development of self-esteem, Robb observes:

> Not only is the process of self-discovery a personal question, but selfhood cannot emerge in isolation; retreating from the world around us is no live option when there is so much work to be done. We need to find the supportive role that each man can give to another. The tragedy is that we live in different worlds and shut ourselves off from each other.[2]

Tally[3] while generally accepting Carl Rogers' postulate that congruence between perceived self and ideal self results from therapeutic counseling, questioned its applicability to a segregated Negro population. In order to test his hypothesis that social class membership was a significant variant affecting any change in self-concept

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[1]Ronald A. Peterson, "Rehabilitation of the Culturally Different: A Model of the Individual in Cultural Change," The Personnel and Guidance Journal, XL (June, 1967), p. 1005.

[2]Wesley J. Robb, "Self-Discovery and the Role of the Counselor," The Personnel and Guidance Journal, XLV (June, 1967).

[3]Page Tally, "The Relationship of Group Counseling to Change in the Self-Concept of Negro Eighth Grade Students" (unpublished Doctoral dissertation, University of Miami, 1967).

attempted through group counseling techniques, Tally randomly selected sixty eighth grade students and divided them into control and experimental groups. He exposed the experimental group, in sub-groups of ten, to one hour of group counseling per week over a period of eighteen weeks. A committee of administrative staff and counseling personnel selected items for a Q-sort pre and post-test and rated the social class standing of the subjects using a criterion of social class rating obtained from the works of authorities in the field. Analysis of the data revealed that group counseling produced a predicted directional movement toward congruence of perceived to ideal self-concept in the experimental sub-group rated low in social class. However, the magnitude of change in both groups was not large enough to be considered statistically significant.

Thomas, attempting to raise the self-concept of ability of low achieving ninth grade students through three separate "treatments," concluded that:

> An expert presenting material designed to enhance self-concept is not an effective means of raising self-concept of ability and achievement among low achieving ninth grade students. A counselor with a similar goal is also not effective. The involvement of parents of low achieving students in a program concerned with the reasons for low achievement is a sufficient means of raising self-concept of ability and achievement among their children. . . . These findings indicate that the use of established significant others to change the self-concept of ability

> will be more successful than attempting to use an "outsider" such as an expert or counselor.[1]

Leib and Snyder[2] investigated the effects of group discussion in underachievement and self-actualization. Using Shostrum's Personal Orientation Inventory, they obtained measurements of self-actualization for twenty-eight underachieving college students. Half of the students participated in a basic psychology class conducted on a group basis, while the remainder received the normal lecture procedure. Significant increments in self-actualization and achievement occurred in all twenty-eight students without significant differences between the lecture and the discussion groups. It was felt that the special attention awarded these underachievers fulfilled lower level needs and released them for self-actualization as well as producing significant gains in grades.

In a review of literature on research involving group procedures between 1963 and 1966, Kagan concluded:

> An increase during the past three years in the number of methodologically sound studies on group procedures provides considerable evidence for the conclusion that certain as yet unspecified group procedures--at the hands of some counselors, with

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[1]Shailer Thomas, "An Experiment to Enhance Self-Concept of Ability and Raise School Achievement among Low Achieving Ninth Grade Students" (unpublished Doctoral thesis, Michigan State University, 1964).

[2]J. W. Leib and W. Snyder, "Effects of Group Discussion in Underachieving and Self-Actualization," Journal of Counseling Psychology, XIV (May, 1967), pp. 282-85.

> some clients, in some settings, and at a certain time --will result in improved client grade point average, attitudes, knowledge and behavior.[1]

Summary

The theoretical foundation for this study is Mead's symbolic interaction theory.

A number of studies of the relationship between self-esteem and academic achievement involving a variety of settings, populations, hypotheses and findings have been reviewed. While most of the horizontal correlational studies demonstrated a significant and positive correlation between self-esteem and academic achievement, a number of inconsistencies were noted.

Evidence was found to support the contention that disadvantaged adults can learn from properly designed educational programs. Such programs must consider the individual and focus directly on his needs if they are to be effective.

There is need for further experimental research designed to test hypotheses built on the assumption of a high correlation between self-esteem and academic achievement of disadvantaged adults.

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[1]Norman Kagan, "Guidance, Counseling, and Personnel Services: Reviews of the Literature for the Three Years Period since April, 1963," Review of Educational Research, XXXVI (April, 1966), p. 284.

Is it possible to influence the self-esteem of disadvantaged adults by employing group guidance in association with academic instruction? Will group guidance programs designed to influence the self-esteem of disadvantaged adults also influence their academic achievement? This study will attempt to answer these questions.

CHAPTER III

RESEARCH SETTING AND POPULATION

Chapter III includes a description of the McNamara Skills Center, Detroit, Michigan, where this study took place. The nature and the characteristics of the adult student population which was studied will be presented.

Setting of the Study

The McNamara Skills Center, 1501 Beard Street, Detroit, Michigan, represents a joint city, state and federal project. The facility was deeded to the Detroit Board of Education by the United States Government, and in the fall of 1964 it was established as a training center for out of school and unemployed youths between sixteen and twenty-one, and adults from age twenty-two to over sixty who lacked the skills required to be effective citizens in our constantly changing economy. The Center is a huge educational complex comprised of several buildings, which occupies a quarter of a million square feet of academic and occupational teaching area and includes a staff of sixty-five instructors working on two shifts. A maximum

of 2600 trainees could be accommodated, but due to a lack of operating funds, the largest number enrolled at one time was 1800 trainees.

The Center is operated by the Detroit Board of Education in cooperation with the Michigan Employment Security Commission, the Detroit Human Resources Development anti-poverty programs, and various satellite social agencies. All training programs are federally funded under provisions of the Manpower Development and Training Act and are administered by the Detroit Board of Education which provides 10 percent of the costs.

The programs at the Center require flexibility to provide for the addition or deletion of courses or programs as the need arises. A basic education program provides remedial education and other special academic help in order to aid trainees to become job-holders. At present over thirty occupational training courses are available to trainees. These courses are divided into five "galaxies": (1) Service Trades, (2) Metal Trades, (3) Automotive Trades, (4) Commercial Foods, and (5) Clerical and Sales.

In general, there are three phases in each training program. The first is a five day orientation period. During this time the students are gradually introduced to a work-school setting, and they are screened for placement in a suitable occupational area through counseling interviews and standardized testing procedures. During the

second phase, the student's day is divided between occupational training and literacy upgrading. Finally, after reaching a level of achievement in the basic skills predetermined for his particular occupational area, the student moves to a full time (eight hour per day) occupational program to further develop job skills.

The Skills Center works in close cooperation with the Michigan Employment Security Commission. The Commission is responsible for all referrals for training, for continuing job counseling at the Center, and for assisting with job placement at the conclusion of the training program.

Research Population

The population for the study included all students who were enrolled in the Concentrated Employment Project (CEP) at the McNamara Skills Center between November, 1967 and June, 1968. The initial enrollment in the program was seventy-two students. At the time of pre-testing late in January, 1968, five of the students had left the program. Thus, only sixty-seven students were administered pre-tests. A final population of fifty-nine students remained in the program when the post-test data was collected in April, 1968. The students were all Negro females and ranged in age from eighteen to forty-five years with a median age of twenty-six years.

The women were referred to the Center by the Michigan Employment Security Commission and met specifications established by the Community Action Center. Under those specifications, a woman was eligible for admission to the program if she had been unemployed for at least fifteen weeks prior to referral, and qualified on an adjusted annual income scale. This scale limited participation to those single persons earning less than $1600 per year. Approximately $500 was added to the scale for each dependent up to a maximum of thirteen dependents. Participation in the training program was voluntary and each trainee received a weekly training allowance. The amount of the stipend was adjusted for the number of dependents that each trainee claimed. The minimum allowance was $47 per week; the maximum allowance was $77 weekly.

Information on the previous educational background of the research population is presented in Table 1:

Table 1.--Previous educational background of 59 Negro females who comprised the population for this study.

Highest Grade Completed	Number of Students	Percent of Students
9th	1	1.65
10th	4	6.9
11th	10	17.0
12th	43	72.8
1 year college	1	1.65
	59	100.00

The students all came from a specific geographical area within the inner-city of Detroit. The approximate boundaries were: Edsel Ford Freeway on the north; Michigan and Jefferson Avenue on the south; Conant Avenue on the east; Livernois Avenue on the west.

The CEP students were divided into four groups. Two of the groups met during the day, and the remaining two groups met in the evening. The training schedules were arranged to overlap so that all of the trainees were at the Center between 3:15 and 4:15 each afternoon. The daytime schedule extended from 8:00 A.M. to 4:15 P.M.; the evening schedule extended from 3:15 to 11:30 P.M.

Summary

The women in this study belong to what is generally known as the culturally and economically disadvantaged segment of the population. The term "culturally disadvantaged" was defined as describing "members of lower socio-economic groups who have insufficient educational background and occupational preparation to satisfactorily compete for jobs, homes and status." "Economically disadvantaged" was defined as designating "impoverished members of lower socio-economic groups characterized by prolonged periods of unemployment and yearly incomes which fall below minimum income standards established by the Office of Economic Opportunity."

While the members of the research population can be included in the above definitions, it should be observed that they represent a particular sub-group within the culturally and economically disadvantaged. This population has some particular characteristics of its own:

1. Members of the population were all Negro.
2. Members of the population were all female.
3. Members of the population were relatively well educated.
4. The members generally represented a young adult population.
5. Members of the population shared a common urban inner-city residential environment.

CHAPTER IV

RESEARCH DESIGN

This chapter details the primary and secondary research hypotheses, the designation of the experimental and the control groups, the development and selection of instruments, the experimental treatment, and the analysis procedure. A summary is included.

Research Hypotheses

Forming the basis for the primary hypotheses of this study are the major assumptions which have been identified in Chapters I and II as being derived from symbolic interaction theory and from a review of the literature of the field. Restated in the if-then paradigm they appear:

If 1. the individual's self-concept is formed by his perception of the way others are responding to him,

And, if 2. the individual's self-concept influences his behavior and serves as a limiting factor in academic achievement as is indicated by research with children in school,

And, if 3. self-esteem is an estimate of personal worth which is placed by the individual upon his self-concept,

And, if 4. a positive correlation exists between self-esteem and academic achievement for adults as it does for children,

And, if 5. disadvantaged adults generally have low self-esteem,

And, if 6. the individual's self-esteem can be influenced through experiences in which others respond to him,

And, if 7. disadvantaged adults can learn and generally respond to learning experiences including group guidance experiences,

Then, the following two primary operational hypotheses can be derived:

1. Selected group guidance experiences will increase the self-esteem of disadvantaged adult students.
2. The academic achievement of disadvantaged adult students will be positively influenced through group guidance experiences which increase self-esteem.

While the hypotheses stated above formed the primary basis of the experimental design of this project, other analyses were made of the data relevant to the

assumptions of this thesis. Additional specific questions drawn from these assumptions and from developing conditions in the research project were stated. They were:

1. It is expected that disadvantaged Negro adults will report low self-esteem. Will low self-esteem be reported by this population of disadvantaged Negro women?
2. It is expected that some attrition of students enrolled in the program will take place during the interval between pre and post-testing sessions. Will those who drop out of the program differ significantly in self-esteem and academic achievement from those who stay in the program?
3. Half of the CEP students at the McNamara Center are enrolled in a day program, the rest are enrolled in an evening school program. Will the day and the evening students differ significantly in self-esteem?
4. The entire program at the Center is based upon sensitivity to the individual and is designed to meet the needs of the disadvantaged adult. It is expected that the total instructional program will serve as a positive influence for all students. Will gains in achievement and self-esteem result from participation in the

standard instructional program without the special treatment added by group guidance?

These questions formed the basis for six secondary hypotheses for this study. They were:

1. Control group students who dropped out of the CEP program will differ significantly in self-esteem from those in the control groups who remained in the program.

2. Control group students who dropped out of the CEP program will differ significantly in academic achievement from those in the control groups who remained in the program.

3. Day students in the CEP program will differ significantly from the evening students in self-esteem and academic achievement.

4. This population of disadvantaged adult Negro women will report a level of self-esteem below the mean of the norm group on the TSCS.

5. Disadvantaged adult students who have initially low self-esteem scores will achieve at a rate less than the mean of the research population in the academic areas of language and arithmetic.

6. Disadvantaged adult students who have initially high self-esteem scores will achieve at a rate higher than the mean of the research population in the academic areas of language and arithmetic.

Additional Assumptions

In addition to the theoretical assumptions listed initially, this research is based on the following operational assumptions:

1. That a valid and reliable measure of self-esteem can be obtained by the administration

of the Tennessee Self Concept Scale and the Personal and Clerical Skill Inventory. This assumption is justified in the section on Instrumentation which follows.

2. That a valid and reliable measure of academic achievement can be obtained by the administration of the Language and Arithmetic sub-tests of the Iowa Test of Basic Skills. This assumption is justified in the section on Instrumentation which follows.
3. That disadvantaged adults generally possess the desire to learn.
4. That further research concerning the relationship between self-esteem and academic achievement is a necessary step in developing new and successful adult education programs for the disadvantaged.

Design of the Study

To test the two primary hypotheses a relatively simple experimental design was chosen. From a population of clerical students enrolled in a training program at the McNamara Skills Center, Detroit, Michigan, two control and two experimental groups were identified. The experimental groups received, in addition to their regular program of instruction, fifty hours of group guidance over a period

of ten weeks. The control groups received the normal program of instruction offered the clerical trainees at the Center. Pre and post-tests designed to measure self-esteem and academic achievement were administered, and the results were subjected to a statistical analysis of covariance and partial correlations.

The design of the study is detailed in separate units for simplification and clarity. The main divisions are:

1. Composition of groups--Cell grouping and rationale for the creation of two experimental groups.
2. Instrumentation--Justification for the standardized and specially designed instruments.
3. Treatment--An explanation of the group guidance and clerical training programs.
4. Testing--A description of the procedures used in testing sessions.
5. Statistical analysis--Procedures employed and rationale for the selection of statistical tests.
6. Summary--A capsulated presentation of the section.

1. Composition of Groups

Two experimental groups and two control groups were formed. Day students and evening students were randomly

assigned to experimental and control groups. A decision to treat the day and evening trainees as two separate populations was made on advice from the Research Consulting Center at Michigan State University in an attempt to permit greater precision in data analyses. It was assumed that characteristics of motivation, aggressiveness, and self-esteem of the day population might differ significantly from those of the evening population. This assumption with respect to self-esteem was tested by a comparison of the day and evening groups.

Early in January, 1968, the seventy-two students enrolled in the CEP program were randomly assigned to the experimental and control groups. The grouping was as follows:

	Experimental	Control
Day	Students 16	Students 16
Evening	Students 20	Students 20

Prior to the initial pre-testing session late in January, five of the students had left the program and this altered the distribution among the groups:

	Experimental	Control
Day	Students 16	Students 16
Evening	Students 17	Students 18

At the time of the post-testing sessions in April, 1968, fifty-nine students remained in the program. The attrition had further altered the cell arrangement, and it appeared as follows:

	Experimental	Control
Day	Students 16	Students 13
Evening	Students 16	Students 14

In all pre-test, post-test comparisons, only data from the fifty-nine students remaining in the program were used.

2. Instruments Used

The Tennessee Self Concept Scale,[1] used to obtain measures of self-esteem, was developed by William H. Fitts for the Tennessee Department of Mental Health. Developmental work on the scale was begun in 1955, and the original test appeared in mimeographed form in 1956. The current printed form was revised and published in 1965. The test measures self-esteem by obtaining indications of the client's capacity for self-criticism and through indications which attempt to convey the following three primary messages about the client: (1) "This is what I am," (2) "This is how I feel about myself," and (3) "This is what I do."[2]

The scale consists of eight sub-scores and a Total Positive Score in order to obtain measures of self-esteem. The Total Positive Score is described by the author:

> This is the most important single score on the Counseling Form. It reflects the overall level of self-esteem. Persons with high scores tend to like themselves, feel that they are persons of value and worth, have confidence in themselves, and act accordingly. People with low scores are doubtful about their own worth; see themselves as undesirable; often feel anxious, depressed and unhappy; and have little faith or confidence in themselves.[3]

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[1] William H. Fitts, Tennessee Self Concept Scale (Nashville: Counselor Recording and Tests, Box 6184, Aklen Station, 1965).

[2] Ibid., p. 2.

[3] Ibid.

The eight sub-scores are described in the test manual as follows:

1. Row 1 P Score-Identity. These are the "what I am" items. Here the individual is describing his basic identity--what he is as he sees himself.

2. Row 2 P Score-Self Satisfaction. This score comes from those items where the individual describes how he feels about the self he perceives. In general this score reflects the level of self satisfaction or self acceptance. An individual may have very high scores on Row 1 and Row 3 yet still score low on Row 2 because of very high standards and expectations for himself. Or vice versa, he may have a low opinion of himself as indicated by the Row 1 and Row 3 scores yet still have a high Self Satisfaction Score on Row 2. These sub-scores are therefore best interpreted in comparison with each other and with the Total P Score.

3. Row 3 P Score-Behavior. This score comes from those items that say "this is what I do, or this is the way I act." Thus this score measures the individual's perception of his own behavior or the way he functions.

4. Column A-Physical Self. Here the individual is presenting his view of his body, his state of health, his physical appearance, skills, and sexuality.

5. Column B-Moral-Ethical Self. This score describes the self from a moral-ethical frame of reference--moral worth, relationship to God, feelings of being a "good" or "bad" person, and satisfaction with one's religion or lack of it.

6. Column C-Personal Self. This score reflects the individual's sense of personal worth, his feeling of adequacy as a person and his evaluation of his personality apart from his body or his relationship to others.

7. Column D-Family Self. This score reflects one's feelings of adequacy, worth, and value as a family member. It refers to the individual's perception of self in reference to his closest and most immediate circle of associates.

8. Column E-Social Self. This is another "self as perceived in relation to others" category but pertains to "others" in a more general way. It reflects the person's sense of adequacy and worth in his social interaction with other people in general.[1]

The author makes the following statements concerning the norm development of the test:

> The standardization group from which the norms were developed was a broad sample of 626 people. The sample included people from various parts of the country, and age ranges from 12 to 68. There were approximately equal numbers of both sexes, both Negro and White subjects, representatives of all social, economic, and intellectual levels and educational levels from elementary school through Ph.D. degree. Subjects were obtained from high school and college classes, employers at state institutions, and various other sources.[2]

Reliability of all test scores was established on data based on test-retest of sixty college students over a two week period. The test-retest reliability coefficient of the Total Positive Score was .92.[3]

Four types of validation procedures were employed and presented by the author: content validity, discrimination between groups, correlation with other personality

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[1] Ibid., pp. 2-3.

[2] Ibid., p. 13.

[3] Ibid., p. 15.

measures, and personality changes under particular conditions.[1]

Crites, in his review of the Tennessee Self Concept Scale observes:

> The author of this scale states the purpose behind its construction as follows: 'Over recent years a wide variety of instruments have been employed to measure the self concept. Nevertheless, a need has continued for a scale which is simple for the subject, widely applicable, well standardized, and multi-dimensional in its description of the self concept.' To a considerable extent the scale fulfills this need.[2]

The Iowa Tests of Basic Skills is generally considered an excellent battery of achievement tests. The reviewers in Buros'[3] Fifth Mental Measurements Yearbook are rarely as enthusiastic as they are in reporting their opinions about this test. Herrick states:

> The real strength of the tests is their curricular validity, careful construction, provisions of adequate norms based on a national sample, and high reliabilities.[4]

In another review, Morgan observes:

> The Iowa Tests are very well constructed and standardized with an excellent background and fundamental research and understanding of educational aims.[5]

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[1] Ibid., p. 17.

[2] John O. Crites (Test Reviews), "Tennessee Self Concept Scale," Journal of Counseling Psychology, XII (Fall, 1965), pp. 330-31.

[3] Oscar Buros, ed., The Fifth Mental Measurements Yearbook (Highland Park, New Jersey: Gryphon Press, 1964).

[4] Virgil E. Herrick (Test Reviews), "Iowa Tests of Basic Skills," in Buros, op. cit., p. 33.

[5] G. A. V. Morgan (Test Reviews), "Iowa Tests of Basic Skills," in Buros, op. cit., p. 36.

The decision to use the sixth grade level of the Iowa Tests of Basic Skills was made after reviewing the results of the complete battery of the Iowa Tests which were administered by the Center to each student during the initial orientation week. In order to guard against familiarity and repetition of test items during subsequent testing sessions (and since Form I of the tests had been used during orientation) Form IV was used for pre-testing and Form III for post-testing.

The Personal and Clerical Skill Inventory (PCSI) was constructed on the advice of Dr. Wilbur Brookover, a member of the researcher's guidance committee, who observed that the standardized Tennessee Self Concept Scale might not be sufficiently precise in design to measure changes which took place as a result of the group guidance sessions. The purpose of the Personal and Clerical Skill Inventory was to attempt to obtain a measure of self-esteem which was based on the specific goals of the CEP program at the Center and which was related to the actual experiences of the students in the program.

Following interviews with the supervisor of the Clerical Skills program, and the supervisor of the Personal Adjustment program, a twenty item inventory was constructed by the researcher. Examination for face validity led to rejection of three items. The remaining seventeen item

inventory was pre-tested using a group of forty-one clerical students at the Center who were not part of the research population.

Items of the inventory asked for expressions of self-esteem in relation to various class related tasks, and for estimates concerning punctuality, the ability to secure and keep a job, and the ability to understand the self and others. All items used the reference group of fellow clerical students in training at the Center. The scale was designed to yield a total summary self-esteem score compiled from the self-esteem subscores of Behavior, Clerical Ability, Academic Ability, Self-Confidence, Understanding Self and Others, and Motivation. Responses were recorded on a Likkert type rating scale. (See Appendix B.)

Self-esteem relating to the behavior of the CEP students at the Center was reported by responding to the following three questions:

7. How do you rate yourself in the following of orders given by your teacher or supervisor compared with other clerical trainees at the Center?
8. How do you rate yourself in following directions given by the teacher or supervisor compared with other clerical trainees at the Center?

12. How do you rate yourself in being on time to class compared with other clerical trainees at the Center?

Self-esteem relating to clerical ability was measured by the CEP students' responses to these questions:

1. Compared with other clerical trainees at the Center, how do you rate yourself in the ability to learn the skill of typewriting?
2. Compared with other clerical trainees at the Center, how do you rate yourself in the ability to learn how to operate office machines other than the typewriter?
6. Compared with other clerical trainees at the Center, how do you rate yourself in the ability to keep records?

Self-esteem relating to academic achievement was measured by asking the students to respond to the following three questions:

3. Compared with other clerical trainees at the Center, how do you rate yourself in the ability to correctly punctuate business letters?
4. Compared with other clerical trainees at the Center, how do you rate yourself in the ability to spell?

5. Compared with other clerical trainees at the Center, how do you rate yourself in the ability to solve arithmetic problems?

Self-esteem relating to self-confidence was measured by asking the students to respond to the following five questions:

9. Compared with other clerical trainees at the Center, how do you rate your ability to work with other people?
10. Do you think you will be better able to find a job than other clerical trainees at the Center?
11. How do you rate your ability to keep a job, compared with other clerical trainees at the Center?
13. Do you feel that you will get promotions faster in your job than will other trainees at the Center?
15. How do you rate your ability to accept responsibility as compared with other clerical trainees at the Center?

Self-esteem relating to motivation was measured with responses to the following question:

17. How do you rate your desire to get ahead in life, compared with other clerical trainees at the Center?

Self-esteem relating to the ability to understand one's self and to understand others was measured with the final two questions:

14. Compared with other clerical trainees at the Center, how do you rate your understanding of "what makes other people tick."

16. Compared with other clerical trainees at the Center, how do you rate your understanding of "what makes you tick."

Application of the Kuder-Richardson twenty reliability estimate ($K\text{-}R_{20}$) to the data obtained from Hoyt's method of scale analysis[1] gave a reliability coefficient of internal consistency of .844. This reliability coefficient was judged to be high enough to permit summary scores of the Personal and Clerical Skill Inventory to be used as an additional measure of self-esteem.

Relevant data regarding all tests appears in Table 2.

3. Treatment

Students in the two experimental groups received fifty group guidance classes over a ten week period. These classes were directed by two members of the Personal Adjustment and Records Department at the Skills Center following

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[1]Cyril J. Hoyt and Clayton L. Stunkard, "Estimation of Test Reliability for Unrestricted Item Scoring Methods," Educational and Psychological Measurement, XII (Winter 1952), pp. 756-58.

a format which had been developed there and had been used with students in other programs. Group guidance classes had not been offered previously to CEP trainees.

Table 2.--Time limits and publishers of all instruments used in this study.

Name of the Test	Time Limit	Publisher
Iowa Tests of Basic Skills		
Arithmetic Concept	30 minutes	Houghton-Miflin, Boston, Mass.
Arithmetic Computation	30 minutes	
Spelling	12 minutes	
Capitalization	15 minutes	
Punctuation	20 minutes	
Usage	20 minutes	
Tennessee Self Concept Scale	none	Counselor Recording and Tests, Nashville, Tenn.
Personal and Clerical Skill Inventory	none	Unpublished

The two staff members who conducted the group guidance classes were not professionally trained counselors, but they were men who had had experience in both educational and business fields. In order to compensate for possible differences in personality and skill of the staff members, each of the men worked with each of the experimental groups at various times during the group guidance classes. The goal of the program was to enhance self-understanding and self-esteem.

The group guidance program included the following topics according to the time sequence listed below:

1. Explanations and discussions designed to improve the understanding of yourself and others; five weeks--twenty-five sessions.
2. Explanations and discussions of the development of healthy job-related attitudes; two weeks--ten sessions.
3. Explanations and discussions designed to improve grooming habits; one week--five sessions.
4. Explanations and discussions of satisfaction stemming from job-related attitudes; two weeks--ten sessions.
5. Job orientation experience; one week--five sessions.

Techniques employed by the staff members utilized both large and small group procedures. Each new topic was initiated in large group sessions using verbal description and persuasion to generally introduce the subject and to provide a measure of inspiration and enthusiasm. The small group discussion which followed used the technique of a "word for today" and a "thought for today" in order to promote discussion. Examples of the "word for today" are: Attitude, Behavior, Punctuality, Dependability, Poise, Efficiency, Adjustment, Motivation, Character, Pride, Honor, Insult, Insubordination, Self-Confidence, Self-Control. Students were first asked to define the word in

question. Discussion evolved from various interpretations and applications of the term in the lives of the trainees.

The "thought for the day" technique was used for the same purpose. Some of those were: Preconceived notions are the hardest to give up; Cleanliness is a sign of respect for fellow man; Dignity can be sold but not bought; For a better tomorrow you have to better today; Honesty toward oneself is rare indeed; Happiness is a task, not a gift; A smile is still the best make-up for a face.

Attempts were continuously made to build self confidence and self-esteem with the discussion techniques. A supportive class rapport, free from negative criticism, was developed. Since the counselors were not professionally trained, several discussions were held between the counselors and the principal investigator on techniques and methods of best promoting student involvement. Central to these discussions was a paper written by the principal investigator, "Some Impressions in Group Counseling," to be used by the counselors in an attempt to clarify their role in the group process. (See Appendix B, p. 152)

A subjective evaluation of the group guidance experience was made by each class member at the close of the sessions. These written evaluations indicated that over ninety percent of the students involved in the group guidance experience rated the classes as being personally enjoyable and helpful in achieving a greater sense of

self-understanding. These comments were interpreted to be a subjective expression of increased self-esteem among the members of the experimental group.

Initially, the students in the experimental group questioned their placement in the group guidance classes and associated their selection for the program with the pre-testing which had been completed. These questions were answered with the explanation that it was impossible to include all of the CEP students in the group guidance classes at the same time for reasons of staff and facilities. It was further explained that the students had been randomly selected to participate in the initial class, and the remaining students would receive similar group guidance classes after the completion of the first session. The pre-testing was explained as a technique for evaluating the effectiveness of the class. The role of the researcher was explained as one of assisting in this evaluation.

Some of the students expressed an initial resentment to the group guidance sessions primarily because the classes were scheduled during a study period. This resentment appeared to subside as the students became involved and interested in the guidance experience.

4. Test Administration

The pre and post-tests were administered personally by the researcher, who in addition to being an experienced

counselor, was trained in the administration and evaluation of educational and psychological tests.

One of the problems in the measurement of adult learning is the time limit imposed by producers of the tests. Research cited in Chapter II had found that age can be a factor in the learning process when a timed performance is essential to the learning task. The same problem arises when time limits are imposed in measurements of learning. For this reason, no time limits were imposed on the measurements of self-esteem for this study. Some of the students finished the TSCS in the anticipated twelve minutes, while others took twice as long.

The time limits established for the Iowa Tests were generous, and all students finished the four language sub-tests within the allotted time. Eleven students did not complete the arithmetic sub-tests within the specified time limits. The judgment was made, to add to the precision of the study, to request all students to stop at the end of the allotted thirty minutes. Consequently, the arithmetic scores possibly do not reflect the actual achievement potential in arithmetic. Considering the small number (eleven) of students who did not finish these sub-tests, it was not felt that this factor significantly affected the data and the findings of the study. (See Table 3)

Table 3.--The number of students completing or failing to complete the pre and post arithmetic sub-tests.

Test	Students Finished	Students Not Finished	Total
Pre-Test			
Arithmetic Computation	62	5	67
Arithmetic Concepts	61	6	67
Post-Test			
Arithmetic Computation	56	3	59
Arithmetic Concepts	57	2	59

The pre-tests were administered on January 22, 1968, to both the day and the evening students during the first three hours of each group's daily schedule. For the day students, the testing sessions were scheduled between 8:00 A.M. and 11:30 A.M.; for the evening students between 3:30 and 7:00 P.M. The testing sessions were scheduled around the student's regular break periods, and additional rests were permitted as recommended by the publisher of the Iowa Tests.

The post-test sessions were scheduled for April 5, 1968. Due to the assassination of Dr. Martin Luther King on April 4, classes at the Center were dismissed, and the testing sessions were rescheduled for Friday, April 12. It must be observed that this condition of national tragedy

served as an intervening factor prior to the post-test sessions and may have had some influence on the results of the experiment.

Make-up arrangements had to be scheduled after each initial testing session. Of the sixty-seven students who completed the pre-test, fifty-nine were present at the original session, and the remaining eight students were tested the following week. At the time of post-testing, forty-nine of the fifty-nine students were tested initially, and the remaining ten students were scheduled during the following week.

The principal investigator was impressed with the cooperation, enthusiasm and earnestness demonstrated by the students during all testing sessions.

5. Statistical Analysis

The analysis of covariance was used as the statistical procedure to test for significant differences in self-esteem and in academic achievement between the control and the experimental groups. The major advantage of this statistical procedure, which accounts primarily for its selection, is its precision in the analysis of experimentally induced variance through the removal of the effects of uncontrolled variables.

In discussing the use of the procedure, Cochran states: "The Covariate X is a measurement, taken on each experimental unit before the treatments are applied, which

is thought to predict to some degree the final response Y on that unit."[1] Applying Cochran's statement to the present study, each pre-test measurement would serve as the covariate to each post-test measurement. Cochran concludes:

> In this use the function of covariance is the same as that of local control (pairing and blocking). It removes the effects of an environmental source of variation that would otherwise inflate the experimental error.[2]

The major uncontrolled variable in this study was intelligence. It was possible, considering the small size of the population which was randomly assigned into experimental and control groups, that there was unequal distribution of academic ability among the two experimental and the two control groups. In effect, analysis of covariance adjusted the means for the effect of the uncontrolled variable of intelligence and made the necessary modifications in sampling error. The corrected sampling error was then used to test for the significance of differences among the adjusted means.

Since it was anticipated that some members of the experimental groups would not gain in self-esteem as a result of the group guidance experience, it was assumed that an analysis of covariance of the differences between

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[1]Wilbur G. Cochran, "Analysis of Covariance: Its Nature and Uses," Biometrics (September, 1957), p. 262.

[2]Ibid., p. 263.

the experimental and control groups would not provide a completely satisfactory test of the second primary hypothesis. Hence, in addition to the analysis of covariance of the differences between the control and the experimental groups, a comparison of the changes in self-esteem to the changes in academic achievement within the groups was made. Using partial correlations in place of gain scores, the changes in self-esteem were correlated with the changes in academic achievement for the experimental groups, the control groups, and the complete group.

The use of partial correlation in place of gain scores was suggested in the Research Consulting Center at Michigan State University. In a pre-test, post-test situation, the procedure measures change by correlating either a pre or a post-test score of the first variable with the post-test score of the second variable, partialling out the pre-test effect of the second variable. The resulting partial correlation is a "more powerful statistical measure of change than can be achieved through the use of raw gain scores."[1]

The following statistical procedures were used to test the six secondary hypotheses: Hypotheses 1 and 2: an analysis of variance; Hypotheses 4, 5, and 6: a comparison

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[1]David Wright, Consultant, Research Consulting Center, Michigan State University, private conversation, January 1969.

of the means; Hypothesis 3: an analysis of covariance. A comparison of the means formed the basis of the analysis of data from the PCSI sub-scales.

Summary

Two primary and six secondary hypotheses have been identified. The experimental design developed specifically to test these hypotheses included:

1. Identification of a population of economically and culturally disadvantaged adults enrolled in a clerical training program at the McNamara Skills Center in Detroit, Michigan.
2. Identification of instruments to measure both self-esteem and academic achievement. The Tennessee Self Concept Scale was chosen to measure self-esteem, and the Iowa Tests of Basic Skills in language and arithmetic was chosen to measure academic achievement. A second measure of self-esteem was obtained through administration of the Personal and Clerical Skill Inventory which was developed by the researcher.
3. Random assignment of both day and evening students into experimental and control groups.

4. Pre-testing of the students in both the experimental and the control groups to provide initial measurements of self-esteem and academic achievement.
5. Involvement of both the control and the experimental groups in the regular CEP program including instruction in language and arithmetic.
6. Involvement of the experimental groups in fifty hours of group guidance over a period of ten weeks.
7. Post-testing of the students in both the experimental and the control groups to provide a second measurement of self-esteem and academic achievement.
8. Testing for significant changes in self-esteem and academic achievement as revealed by pre and post-test scores of the experimental and the control groups through the statistical procedure of analysis of covariance.
9. Testing for changes in self-esteem and academic achievement within the experimental and the control groups by the statistical procedure of partial correlation.

10. Testing the six secondary hypotheses using the statistical procedures of analysis of covariance, analysis of variance, and a comparison of means.
11. Analysis of the data of the sub-tests of the Personal and Clerical Skill Inventory using a comparison of the means.

CHAPTER V

RESEARCH FINDINGS

Following a list of limitations, the data in this chapter are organized into four separate sections. The first section, Findings: Differential Variance in Self-Esteem between Control and Experimental Groups, reports findings related to the first hypothesis. Data for the section are summarized in the chapter, and statistical details are presented in tabular form in Appendix A.

The second section, Findings: Differential Variance in Academic Achievement, reports findings related to the second primary hypothesis. Data are summarized in the chapter, and the statistical details are presented in tabular form in Appendix A.

The third section, Findings: Secondary Hypothesis, reports significant findings concerning questions closely related to the two primary hypotheses.

A summary of findings and conclusions is reported in the final section of the chapter.

Limitations

The following limitations serve to frame the findings in terms of the real limits of this project.

These limitations are:

1. The assassination of Dr. Martin Luther King intervened between the pre and post-testing sessions. This could have exerted an influence upon the self-esteem measurements reported in this study.
2. In a sense, all students were involved in a "treatment" process by their involvement in the CEP program at the Center. Recognition of this condition was important when the groups were compared for gains in achievement and in self-esteem.
3. Pre-test measurement of self-esteem and academic achievement were obtained before the group guidance experience began, but after all of the students had been enrolled in the CEP program for at least six weeks.
4. Randomization was effected in assigning the day students to experimental and control groups, and the evening students to experimental and control groups. Students were not randomly assigned to the day and the evening groups.
5. The economically and culturally disadvantaged adult student population used in this study consisted of adult Negro women from one inner city urban area.

6. The counselors involved in the group guidance experiment were not professionally trained guidance personnel.

Findings: Differential Variance in Self-Esteem between Control and Experimental Groups

Stated in the null form, the first research hypothesis was:

Ho_1 No significant difference exists between the post-test self-esteem scores of the guided and non-guided groups of disadvantaged adult clerical students when the pre-test self-esteem scores of both groups are controlled.

In the analysis of covariance, each sub-score and the Total Positive score on the TSCS, and the summary score on the Personal and Clerical Skill Inventory were used as measures of self-esteem. For each of the ten scores the level of statistical significance was established at the .05 level. The post-test mean scores on each of the self-esteem tests for the guided and non-guided groups were compared using the pre-test mean scores as co-variables.

The analysis of covariance failed to show a significant difference in self-esteem between the guided and non-guided groups. Hence, no evidence was produced

to reject the first null hypothesis as stated above. Results are given in Table 4.

With the exception of the score on the Personal and Clerical Skill Inventory, the non-guided groups consistently reported higher self-esteem scores than did the guided groups. It had been hypothesized that the group guidance experience would significantly raise self-esteem. This hypothesis was not supported, and it appears that any difference in self-esteem between the guided and non-guided groups tended to favor the non-guided. Except for the sub-tests of Self Satisfaction and Family Self, the differences between the groups were very small. While the differences in Self Satisfaction (.06) and Family Self (.15) were not statistically significant at the .05 level, they are of logical significance, and the unexpected direction of difference begs explanation. These differences seem to indicate that the group guidance experiment produced a negative effect on the self-esteem of the guided groups.

A description of the Self Satisfaction sub-test is cited from the TSCS manual:

> This score comes from those items where the individual describes how he feels about the self he perceives. In general this score reflects the level of self satisfaction or self acceptance.[1]

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[1]Fitts, op. cit., p. 2.

Table 4.--Results of the analysis of covariance on the TSCS and Personal and Clerical Skill Inventory self-esteem scores of the guided and non-guided groups of Negro women.

Self-Esteem Sub-Test	Non-Guided Group Post-Test Mean N=27	Guided Group Post-Test Mean N=32	B-F Ratio G/NG Group	Significance Probability	Significance .05 Level
Skill Inventory	6.6	6.7	.39	.53	NS
Physical Self	76.9	75.5	.00	.98	NS
Moral Self	72.8	72.1	.34	.56	NS
Personal Self	70.5	67.0	.91	.35	NS
Family Self	74.9	71.8	2.14	.15	NS
Social Self	74.8	71.8	.00	.98	NS
Identity	135.5	131.7	.00	.96	NS
Self Satisfaction	118.6	110.5	3.71	.06	NS
Behavior	117.7	116.0	.05	.83	NS
Total P. Score	369.8	358.09	.64	.63	NS

Family Self is described in the manual as follows:

> This score reflects one's feelings of adequacy, worth and value as a family member. It refers to the individual's perception of self in reference to his closest and most immediate circle of associates.[1]

Hence, the findings suggest that the group guidance experience raised feelings of doubt concerning self-acceptance and worth as a family member. Instead of increasing self-esteem, the group guidance experience appears to have produced or confirmed individual feelings of inadequacy.

One of the limitations of the study should be considered in interpreting these findings. The use of counselors who lacked formal preparation in counseling and guidance techniques must be considered a relevant factor.

Summary

Small and statistically insignificant differences were reported between the guided and non-guided groups. It was not anticipated that these differences would favor the non-guided groups. It appears that the group guidance experience tended to exert a negative influence on self-esteem rather than the positive influence which had been anticipated.

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[1] Ibid.

Findings: Differential Variance in Academic Achievement

The testing of the second primary hypothesis involved two separate comparisons. The first, stated in Ho_2, compared the academic achievement of the guided groups with the academic achievement of the non-guided groups. The second, stated in Ho_3, determined the relationship between changes in self-esteem and changes in academic achievement which took place within each group.

Ho_2 No significant difference exists between the post-test achievement scores in language and arithmetic of the guided and non-guided groups of disadvantaged adult clerical students when the pre-test achievement scores are controlled.

In testing Ho_2, comparisons were made of achievement in language and arithmetic between the guided and the non-guided groups. Since self-esteem of the guided group did not significantly increase as hypothesized, it was not expected that the achievement scores would differ significantly. Table 5 reports the results of the analysis of covariance used to test Ho_2. This analysis failed to reject the second primary null hypothesis.

Ho_3 No significant positive relationship can be identified between changes in self-esteem and changes in academic achievement for

Table 5.--Results of the analysis of covariance on the language and arithmetic post-test achievement scores (Iowa Tests of Basic Skills) of guided and non-guided groups of Negro women.

Achievement Sub-Test	Non-Guided Group, Grade Level Mean N=27	Guided Group Grade Level Mean N=32	B-F Ratio G/NG Group	Significance Probability	Significance .05 Level
Spelling	8.5	8.5	.00	.998	NS
Capitalization	7.6	7.3	.19	.67	NS
Punctuation	7.1	6.7	2.48	.12	NS
Usage	7.1	7.3	.05	.82	NS
Total Language	7.6	7.4	.35	.55	NS
Arithmetic Concepts	6.9	7.0	.40	.52	NS
Arithmetic Problem Solving	8.1	8.1	.00	.98	NS
Total Arithmetic	7.5	7.5	.23	.64	NS

members of either the guided or non-guided groups.

Further analysis was necessary to determine the relationship between self-esteem and the variance in academic achievement which took place within the guided and the non-guided groups. This analysis was designed to answer the following questions concerning the relationship between self-esteem and academic achievement for members of the non-guided group, the guided group, and the two groups taken as a whole.

1. How did the pre-test self-esteem scores correlate with the gain in academic achievement?
2. How did the post-test self-esteem scores correlate with the gain in academic achievement?
3. How did gains in self-esteem correlate with gains in academic achievement?

Partial correlations were computed by correlating the pre-test Total P self-esteem scores and the post-test achievement scores, then partialling out the effect of the pre-test achievement scores. This procedure determined the gain in achievement in relation to the pre-test Total P score for each group. These correlations appear in Tables 6 and 7.

Table 6.--Partial correlations showing the relationship between pre-test (Total P) self-esteem scores and the gain in arithmetic achievement for each group.

Group	Partial Correlation
Complete Group	-.03
Experimental Group	-.20
Control Group	.24

Table 7.--Partial correlations showing the relationship between pre-test (Total P) self-esteem scores and the gain in language achievement for each group.

Group	Partial Correlation
Complete Group	.01
Experimental Group	.00
Control Group	.09

A comparison of the correlation between the pre-test Total P scores and the gains in arithmetic achievement for the guided group (-.20) and the non-guided group (.24) was significant. It has already been indicated that the group guidance experience had a negative influence upon the self-esteem of the guided group. The partial correlations reported in Table 6 indicated that the arithmetic achievement of the guided group was also negatively influenced.

Partial correlations indicating the relationship between the post-test Total P self-esteem scores and the gains in arithmetic and language achievement are shown in Tables 8 and 9 below.

Table 8.--Partial correlations showing the relationship between post-test (Total P) self-esteem scores and the gain in arithmetic achievement for each group.

Group	Partial Correlation
Complete Group	.01
Experimental Group	-.21
Control Group	.38

Table 9.--Partial correlations showing the relationship between post-test (Total P) self-esteem scores and the gain in language achievement for each group.

Group	Partial Correlation
Complete Group	.06
Experimental Group	.02
Control Group	.16

When the post Total P self-esteem score was correlated with the gain in arithmetic achievement and the gain in language achievement, differences in achievement between the guided and non-guided groups were easily

distinguished. The negative effect of the group guidance experience was reflected particularly in the achievement of arithmetic skills. These correlations compare favorably with the correlations of pre-test Total P self-esteem scores and academic achievement reported in Tables 6 and 7.

Tables 10 and 11 report correlations of the relationship of the gain in self-esteem and the gain in academic achievement within each group.

Table 10.--Partial correlations showing the relationship between the gain in self-esteem and the gain in arithmetic achievement for each group.

Group	Partial Correlation
Complete Group	.07
Experimental Group	-.06
Control Group	.29

Table 11.--Partial correlations showing the relationship between the gain in self-esteem and the gain in language achievement for each group.

Group	Partial Correlation
Complete Group	.09
Experimental Group	.06
Control Group	.13

Support was not found for the null hypothesis stated in Ho_3.

A positive relationship between self-esteem and academic achievement was identified in the analysis of changes in both groups. In the non-guided group, a gain in self-esteem was accompanied by a gain in academic achievement.

The group guidance experience was designed to positively influence the self-esteem of the guided group. It has been observed that the opposite was the case, and the group guidance experience appears to have had a negative influence on the self-esteem of the guided group. This negative influence has also been reflected in the academic achievement of the guided group. This experience of the guided group can be interpreted to support the corollary of the assumed relationship between self-esteem and academic achievement; negative influences upon self-esteem will be reflected in negative influences on academic achievement.

Summary

A comparison of the academic achievement of the guided and non-guided groups did not identify a significant difference in achievement between the two groups. This finding was anticipated after it was determined that the self-esteem of the guided groups had apparently been

negatively (rather than positively) influenced by the group guidance experience.

An analysis of the relationship between self-esteem and academic achievement consistently demonstrated a positive correlation between these two variables. When self-esteem was negatively influenced, academic achievement was similarly influenced. When self-esteem was positively influenced, a corresponding change was noted in academic achievement.

Findings: Secondary Hypotheses

In order to more accurately interpret the findings of the primary hypotheses, additional analyses were conducted to test six secondary hypotheses.

It has been observed that eight students dropped out of the CEP program while the experiment was in progress, and that seven of the eight students were members of the non-guided groups. The first two secondary hypotheses are concerned with the possible effect of the attrition of these students on the composition of the non-guided groups.

1. Control group students who dropped out of the CEP program differed significantly in self-esteem from those in the control group who remained in the program.

In order to compare the self-esteem of the control group dropouts with the self-esteem of the control group stay ins, an analysis of variance was made on the pre-test self-esteem data of each group. The analysis was designed to identify significant differences in self-esteem at the .05 level of significance for the sub-tests and the Total P score on the TSCS. The result of the analysis is presented in Table 12.

While the difference in self-esteem between the control group dropouts and the control group stay ins was not statistically significant at the .05 level for any of the self-esteem sub-tests or the Total P score on the TSCS, a comparison of the mean scores showed a small but consistent difference between the two groups. The dropouts reported consistently lower mean scores on the TSCS than did the stay ins.

Summary

The difference in self-esteem for the seven students who dropped out of the control group was not statistically significant at the .05 level. However, the general expectation that the mean level of self-esteem would be lower for the control group dropouts than for the control group stay ins cannot be rejected in light of the consistently, though very slightly, lower TSCS mean scores of the dropouts.

Table 12.--Results of the analysis of variance on the TSCS pre-test self-esteem mean scores of control group dropouts and control group stay ins.

Control Group Dropouts N=7			Control Group Stay Ins N=27			
TSCS Self-Esteem Sub-Test	Mean Scores	S.D.	Mean Scores	S. D.	F Statistic	Significance
Physical Self	70.16	5.19	75.00	9.10	1.55	.22
Moral Self	72.50	8.89	73.11	8.06	.03	.87
Personal Self	65.33	5.78	69.03	7.61	1.24	.27
Family Self	68.17	12.99	72.00	10.19	.63	.43
Social Self	70.33	7.86	74.00	5.19	2.43	.12
Identity	129.66	8.16	133.19	10.57	.58	.45
Self Satisfaction	107.16	14.28	112.92	13.13	.90	.34
Behavior	110.83	11.12	117.84	12.53	1.58	.21
Total P	347.66	30.38	363.96	31.26	1.33	.25

2. Control group students who dropped out of the CEP program differed significantly in academic achievement from those in the control group who remained in the program.

Differences in the pre-test language and arithmetic achievement levels of the control group dropouts and control group stay ins are shown in Table 13.

Inspection of the data presented in Table 13 identified a statistically significant difference between the control group dropouts and stay ins in language achievement. The difference was statistically significant at the .025 level for the language achievement sub-test of Spelling and at the .0005 level for the sub-test of Language Usage. The data appears to indicate that the students who dropped out of the CEP program had pronounced difficulty in language achievement skills.

A barely perceptible variance in arithmetic achievement between the two groups was noted.

Summary

A statistically significant difference was found between the control group dropouts and the control group stay ins in the language achievement pre-test mean scores.

It has been found that the self-esteem and the academic achievement of the control group has been affected by the attrition of seven control group students.

Table 13.--Results of the analysis of variance on the pre-test language and arithmetic achievement grade level mean scores of the control group dropouts and the control group stay ins.

Control Group Dropouts N=7			Control Group Stay Ins N=27			
Achievement Sub-Test	Grade Level Mean Score	S.D.	Grade Level Mean Score	S.D.	F Statistic	Significance
Spelling	7.2	.73	8.4	1.2	5.56	.025
Capitalization	6.7	2.4	7.2	1.7	.39	.53
Punctuation	5.7	2.3	6.3	1.3	.64	.42
Usage	4.7	1.1	7.1	1.0	23.47	.0005
Total Language	6.1	1.5	7.3	1.0	5.21	.03
Arithmetic Concepts	6.3	.6	6.3	1.0	.00	.99
Arithmetic Problem Solving	7.0	.8	7.6	1.4	1.12	.29
Total Arithmetic	6.7	.7	7.0	1.1	.41	.52

The self-esteem of the control group dropouts, while not statistically different from the self-esteem of the control group stay ins, was observed to be slightly lower. The language achievement of the dropouts was significantly lower.

These findings, however, do not appear to affect the findings relevant to the first primary hypothesis of this study. The self-esteem of the control group was not significantly influenced by the dropouts. Hence, the attrition of these students probably did not significantly affect comparisons of self-esteem made between the guided and the non-guided groups in the analysis of covariance used to test the first primary hypothesis.

The effect of the dropouts on the second primary hypothesis is less clear. It is possible that the lower language achievement of the dropouts could have affected the analysis of the variance in academic achievement between the guided and the non-guided groups. It is certain that the partial correlations showing the relationship between self-esteem and the gain in language achievement for the control group would be lower than the correlations which were reported in Table 7,[1] 9,[2] and 11.[3] The control

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[1] Supra, p. 79.

[2] Ibid., p. 80.

[3] Ibid., p. 81.

group dropouts do not appear to have affected the arithmetic achievement of the unguided groups.

Since only one of the dropouts was a member of the guided group, it could be interpreted that the group guidance experience served to keep students in the CEP program. While a definitive conclusion cannot be drawn, it is possible to speculate that the group guidance experience provided a measure of holding power which was lacking in the normal CEP program. This suggests then, that guidance may override the negative influence of low self-esteem or low academic achievement.

3. Day students in the CEP program will differ significantly from evening students in self-esteem and academic achievement in language and arithmetic.

A difference in self-esteem and academic achievement between the day and the evening groups had been anticipated. It was reasoned that women who attended school at night (in an environment where night movement could present some threat to personal safety) could be expected to exhibit greater desire for education and achievement. These women would be more likely to demonstrate higher levels of self-esteem than would other women not thus inspired. In order to test this hypothesis, day students were compared to evening students using the self-esteem mean scores of each group and the grade level

means of the achievement sub-tests in language and arithmetic of each group. The data were statistically analyzed using the analysis of covariance, and the results are presented in Tables 14 and 15.

An inspection of Table 14 revealed that the students in the day group consistently reported higher levels of self-esteem than did students in the evening group. While the difference was considered statistically significant at the .05 level only for the sub-test Identity, reasonably high estimates of probability of significance were reported for the sub-tests Physical Self (.11), Personal Self (.18), Social Self (.23), Self Satisfaction (.26), and the Total Positive Score (.20).

Reasoning that evening students would have to devote more effort and determination to achieve their educational goals than would day students, it had been anticipated that differences in self-esteem would favor the evening group. The data did not support this assumption.

The finding of a significant difference between the day and the evening group on the TSCS sub-test Identity is interesting. This sub-test is described in the test manual as:

> These are the "What I am" items. Here the individual is describing his basic identity--what he is as he sees himself.[1]

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[1]Fitts, op. cit., p. 54.

Table 14.--Results of the analysis of covariance on the TSCS and Personal and Clerical Skill Inventory self-esteem scores for the day and evening groups of students.

Self-Esteem Sub-Test	Day Group Mean N=29	Evening Group Mean N=30	B-F Ratio Day/Evening Group	Significance Probability	Significance .05 Level
Skill Inventory	87.1	85.1	.78	.38	NS
Physical Self	77.6	74.8	2.62	.11	NS
Moral Self	74.1	70.8	.52	.47	NS
Personal Self	71.7	65.8	1.84	.18	NS
Family Self	75.8	70.9	.17	.67	NS
Social Self	75.5	71.1	1.43	.23	NS
Identity	136.8	128.4	6.81	.01	S
Self-Satisfaction	119.0	110.0	1.28	.26	NS
Behavior	118.8	114.9	.05	.82	NS
Total P Score	374.5	352.4	1.68	.20	NS

Table 15.--Results of the analysis of covariance on mean scores of the language and arithmetic achievement sub-tests for the day and the evening groups.

Achievement Sub-Test	Day Group Mean N=29	Evening Group Mean N=30	B-F Ratio Day/Evening Group	Significance Probability	Significance .05 Level
Spelling	8.75	8.3	.86	.36	NS
Capitalization	7.3	7.6	5.13	.02	S
Punctuation	6.9	6.8	.75	.38	NS
Usage	7.4	6.7	3.84	.06	NS
Total Language	7.6	7.4	.61	.44	NS
Arithmetic Concepts	7.0	6.8	.05	.83	NS
Arithmetic Problem Solving	8.1	8.0	.36	.55	NS
Total Arithmetic	7.5	7.5	.05	.82	NS

This seems to suggest that the day students were more goal oriented than the evening students and would also suggest a higher prognosis for success for the day students than for the evening students.

Data reported in Table 15 indicated that the day and the evening groups were similar in their mean post-test achievement levels for the sub-tests of language and arithmetic. Only the sub-test Capitalization showed a statistically significant difference favoring the evening group. The difference between the day and the evening groups in Language Usage approached statistical significance in favor of the day group.

Summary

The assumption that evening students would report higher self-esteem and academic achievement than day students was not supported. Rather, day students were shown to possess a greater sense of individual identity than evening students. This difference was statistically significant at the .05 level. The self-esteem of the day group appeared to be generally higher than the self-esteem of the evening group.

Some inconsistent differences in academic achievement were noted between the day and evening groups. A statistically significant difference in Capitalization favored the evening group, and a variance approaching

significance (at the .05 level) in Language Usage favored the day group.

4. This population of disadvantaged adult Negro women will report a level of self-esteem below the mean of the norm group on the TSCS.

One of the assumptions of this thesis was that the economically and culturally disadvantaged adult had low self-esteem. It was generally supported in the literature that among Negro children, low self-esteem was the result of both disadvantaged cultural conditions and the color-caste complex which has premeated American society. However, a low self-esteem was observed to be more characteristic of disadvantaged Negro boys than of Negro girls.

Table 16 reports, for the 59 Negro women in this study, the mean post-test self-esteem scores on each of the sub-tests and the Total P score on the TSCS and the corresponding percentiles based on the standardized norms of the test.

Assuming the 50th percentile to be the point above which one half of a normal population would score, and below which the other half would score, the fifty-nine Negro women who comprised the research population reported mean scores which ranked at or above the 50th percentile on each of the sub-tests and on the Total P score on the TSCS.

Table 16.--A comparison of mean post-test self-esteem scores on the TSCS of 59 Negro women and percentiles of the norm group of the TSCS. N=59

TSCS Sub-Test Total P Score	Mean of Scores for Study Population	S.D.	TSCS Norm Group Percentile Level
Physical Self	73.87	9.53	55
Moral Self	73.89	9.18	60
Personal Self	67.51	9.69	60
Family Self	71.75	11.90	50
Social Self	72.34	9.61	70
Identity	131.50	11.56	60
Self Satisfaction	110.46	17.85	65
Behavior	116.93	15.45	58
Total P Score	358.89	42.05	60

The mean self-esteem scores of the research population were considerably higher than the norm group used to standardize the TSCS. This group was described in the test manual as follows:

> The standardization group from which the norms were developed was a broad sample of 626 people. The sample included people from various parts of the country, and age ranges from 12 to 68. There were approximately equal numbers of both sexes, both Negro and white subjects, representatives of all social, economic, and intellectual levels and educational levels from 6th grade through the Ph.D degree. Subjects were obtained from high school

and college classes, employers at state institutions and various other sources.[1]

Some caution needs to be exercised in the interpretation of this finding. While the research population was identified as being culturally and economically disadvantaged, it cannot be assumed that it is "typical" of this group. Since the entire population was female; since the population was selected to participate in the CEP program; and since the population was subjected to a natural attrition process, the remaining members of the population can hardly be concluded to represent a random sample of the economically and culturally disadvantaged.

The distribution of the self-esteem Total P scores of the research population into quartiles of the national norm scores of the TSCS is given in Table 17.

Table 17.--Distribution of Total P scores on the TSCS of the research population into quartile ranges established by the norm group of the TSCS.

TSCS Total P Score Range of Research Population	Frequency N=59	% of Research Population	Percentile Range Based on TSCS Norm Group
150-325	10	16	1-25
326-350	12	20	26-50
351-375	14	24	51-75
376-450	23	39	76-99.99

[1]Fitts, op. cit., p. 56.

An inspection of Table 17 indicates a wide variance in self-esteem among individual members of the research population. The scoring range on the Total P was 226 points, from a high score of 423 (ranking at the 99th percentile), to a low Total P score of 197 (ranking at the 1st percentile of the national frequency distribution). Only ten of the women (16%) scored in the first quartile; 12 (20%) in the second quartile; 14 (24%) scored in the third quartile; and 23 (39%) scored in the top quartile.

Summary

The hypothesis that this population of disadvantaged adult Negro women will report low self-esteem was not supported by the data of this study. On the contrary, the mean population self-esteem scores on each of the sub-tests and the Total P score on the TSCS ranged between the fiftieth and the seventieth percentiles. A wide range among individual self-esteem Total P scores was also observed with 63% of the research population scoring above the 50th percentile.

5. Disadvantaged adult students who have low self-esteem will achieve at a rate less than the mean of the research population in the academic areas of arithmetic and language.

Another of the assumptions of this study was that self-esteem affects the rate of learning. Students with low self-esteem are assumed to have difficulty in achieving; hence the rate of their learning will be less than that of other students. In order to gather evidence to support or to reject this hypothesis, students with low self-esteem scores on the pre self-esteem tests were identified from the research population. Three separate measures of self-esteem were used to confirm the results: The Total P score and the Self Satisfaction score on the TSCS, and the Personal and Clerical Skill Inventory score. A percentile scale was developed for each test. Students who scored below the 25th percentile in each of the tests were listed, and their achievement noted. Results are reported in Table 18.

Three measures of self-esteem were used to identify low self-esteem students from the research population, and as a consequence the composition of each group differed. As could be expected, low self-esteem groups identified by the Total P and Self Satisfaction scales were very much alike; thirteen of the fifteen students were identified as having low self-esteem on both scales. Hence, these two groups differed by only two students. Greater variance in composition was evident when the fifteen students who fell within the first quartile on the Personal and Clerical Skill Inventory were listed.

Table 18.--Comparison of mean gains in language and arithmetic achievement of 15 low self-esteem students with the achievement mean for the research population as a whole.

Self-Esteem Test	Mean Language Gain in Grade Level Units		Mean Arithmetic Gain in Grade Level Units	
	Low Self-Esteem Students N=15	Research Population N=59	Low Self-Esteem Students N=15	Research Population N=59
Self Satisfaction	.08	.2	.23	.37
Total P	.18	.2	.20	.37
Personal and Clerical Skill	-.12	.2	.24	.37

Of these fifteen students, only five appeared on the low self-esteem lists of the Total P and the Self Satisfaction scales.

An inspection of Table 18 indicates that the mean gain in language and arithmetic for low self-esteem students on all three self-esteem scales was less than the mean gain for the research population.

Summary

The hypothesis that disadvantaged adult students with low self-esteem will achieve at a rate less than the mean for the research population in the academic areas of language and arithmetic was supported.

6. Disadvantaged adult students who have high self-esteem will achieve at a rate higher than the mean for the research population in the academic areas of arithmetic and language.

Again, the assumption is that level of self-esteem is directly associated with the rate of learning. Data from the study have given support to the hypothesis that low self-esteem is associated with slow rate of learning. This hypothesis poses the obverse question.

The Total P score and the Self Satisfaction subtest score on the TSCS and the summary score on the Personal and Clerical Skill Inventory were used to identify students with high self-esteem from the research

population. A percentile scale was developed for each test. Students who scored above the 75th percentile in each test were listed, and their achievement noted. The results are reported in Table 19.

The three groups of students identified as having high self-esteem differed in composition as did the groupings of low self-esteem students. Thirteen of the fifteen students were identified by both the Self Satisfaction scale and the Total P scale as having high self-esteem while only nine of the high self-esteem students identified by the Personal and Clerical Skill Inventory appeared on the other lists.

An inspection of Table 19 permits the following observations:

1. The mean gain in language achievement was greater than the mean gain for the research population for all three groups of high self-esteem students.
2. The mean gain in arithmetic achievement was less than the mean gain of the population for all three groups of high self-esteem students.

Both high and low self-esteem students have been observed to fall beneath the population mean gain of .37 years in arithmetic achievement. It must be assumed that the mean gain in arithmetic achievement of students in the

Table 19.--Comparison of mean gains in language and arithmetic achievement of 15 high self-esteem students with the achievement mean for the research population as a whole.

Self-Esteem Test	Mean Language Gain in Grade Level Units		Mean Arithmetic Gain in Grade Level Units	
	High Self-Esteem Students N=15	Research Population N=59	High Self-Esteem Students N=15	Research Population N=59
Self Satisfaction	.42	.2	.21	.37
Total P	.35	.2	.33	.37
Personal and Clerical Skill	.38	.2	.29	.37

middle quartiles on all three self-esteem scales was above the population mean gain.

An inspection of data supported this assumption. Students in the second and third quartiles on the self-satisfaction scale reported a mean gain of .52 years in arithmetic achievement; on the Total P scale and on the PCSI these students reported a gain of .48 years in arithmetic achievement.

Summary

While the mean gain in language achievement was greater for the high self-esteem students than the mean gain for the research population, a similar increase was not recorded in arithmetic achievement.

Findings Based on an Analysis of the PCSI

An analysis was made of self-esteem data from the sub-scales of the Personal and Clerical Skill Inventory (PCSI) which had been designed to obtain a measure of self-esteem based on the specific goals of the CEP program.

One of the unexpected findings reported earlier in this study was the apparent negative influence of the group guidance experience upon the self-esteem (measured by the TSCS) of the guided group. Analyses of self-esteem data reported by the PCSI sub-tests supported this finding.

A comparison was made of differences between pre and post-test scores of the PCSI sub-tests for the guided

and non-guided groups. The sub-test, understanding self and others, indicated a loss of self-esteem for the guided groups. On the clerical, behavior, self-confidence and motivation self-esteem sub-tests, gains in self-esteem for the non-guided group exceeded the gain in self-esteem recorded by the guided group. On the sub-scale reporting self-esteem of academic ability, the guided group reported a slightly higher mean gain than did the non-guided group. These results are presented in Table 20 below.

Table 20.--Differences between pre and post-test scores on the PCSI for the guided and non-guided groups of clerical students.

PCSI Sub-Scales of Self-Esteem	$\bar{X}$ Raw Score Point Gain or Loss for Guided Group N=32	$\bar{X}$ Raw Score Point Gain or Loss for Non-Guided Group N=27	Maximum Points for Each Sub-Scale
Understanding Self and Others	-.06	+ .48	10
Clerical	+.50	+ .81	15
Behavior	+.65	+1.04	15
Self-Confidence	+.81	+1.55	25
Motivation	+.07	+ .09	5
Academic	+.53	+ .37	15

On four of the six PCSI sub-scales of self-esteem, the non-guided group reported an increase in self-esteem at approximately twice the rate of the guided groups. One of the specific objectives of the group guidance program was to improve the understanding of self and others. It is important to observe that this was the only sub-scale of the PCSI where the guided groups' post-test scores were actually lower than their pre-test scores.

Analysis of the data of the PCSI tends to support the findings based on the TSCS. The group guidance experience appears to have exerted a negative influence upon the self-esteem of the guided group.

One of the components of self-esteem in the PCSI has been identified as a self-esteem of academic ability. Since this component of self-esteem is directly related to academic achievement, a complete analysis of the data for this sub-scale and the achievement of the students will be presented.

Tables 21 and 22 present an analysis of the academic achievement of those students in the guided and non-guided groups who reported high and low self-esteem of academic ability on the pre and post-tests of the PCSI. Academic achievement was measured by the language and arithmetic sub-test of the Iowa Test of Basic Skills.

When pre-tests were used as the bench mark of self-esteem of academic ability, the expected correlation

Table 21.--Academic achievement gains of the 14 nonguided students who fell in the 1st and 4th quartiles on the pre and post-PCSI self-esteem of academic ability sub-scale.

PCSI Pre-Test Self-Esteem of Academic Achievement N=7	$\bar{X}$ Total Gain in Academic Achievement (Months)	PCSI Post-Test Self-Esteem of Academic Achievement N=7	$\bar{X}$ Total Gain in Academic Achievement (Months)
Q_1-Nonguided Group	7.3	Q_1-Nonguided Group	5.9
Q_4-Nonguided Group	5.9	Q_4-Nonguided Group	7.4

Table 22.--Academic achievement gains of 16 guided students who fell into the 1st and 4th quartiles on the pre and post-PCSI self-esteem of academic ability sub-scale.

PCSI Pre-Test Self-Esteem of Academic Achievement N=8	$\bar{X}$ Total Gain in Academic Achievement (Months)	PCSI Post-Test Self-Esteem of Academic Achievement N=8	$\bar{X}$ Total Gain in Academic Achievement (Months)
Q_1-Guided Group	5.6	Q_1-Guided Group	3.2
Q_4-Guided Group	6.5	Q_4-Guided Group	10.5

between self-esteem and academic achievement was not realized. The low self-esteem students of the non-guided groups posted a higher gain in academic achievement than did the high self-esteem students of either group. However, when the post-test scores of self-esteem of academic ability were used as the reference point, the anticipated correlations were observed. This was particularly evident in the guided groups where low self-esteem students gained only 3.2 months while high self-esteem students gained 10.5 months. This raises the question of the validity of the pre-test scores of the self-esteem of academic ability. Since the questions on the PCSI related individual estimates of achievement to the other members of the group, and since the students had been away from school for some period of time, it is possible that individual estimates of self-esteem of academic ability may have been inflated. It is also possible that the self-esteem of academic ability may be a result of, as well as a cause of, academic achievement. The two variables may interact in some cases.

If the pre and post-test measures of self-esteem of academic ability were valid, it would be anticipated that a gain in self-esteem of academic ability would be associated with a gain in individual academic achievement. A comparison of the gain or loss in self-esteem of academic ability with the actual gain or loss, shown in

Table 23, did not support these anticipated results. This finding also serves to question the accuracy of the pre-test data on the self-esteem of academic ability.

Table 23.--Gains or losses in self-esteem of academic ability (measured on PCSI) of 59 clerical students compared to gains in academic achievement.

Frequency N=59	Gain or Loss in PCSI Self-Esteem of Academic Ability	Total Gain in Academic Achievement in Months	$\bar{X}$ Gain in Academic Achievement in Months
1	-4	1	1.0
2	-3	24	12.0
4	-2	3	.8
10	-1	69	6.9
14	No Change	99	7.0
10	+1	45	4.5
10	+2	70	7.0
5	+3	7	1.4
3	+4	34	11.0

Inspection of Table 23 indicated that 17 students decreased in their self-esteem of academic ability between pre and post-testing sessions. Their mean achievement gain was 5.7 months. Fourteen students did not change and their mean achievement gain was 7.0 months.

Twenty-eight students raised their self-esteem of academic ability during the same period and recorded a mean achievement gain of 5.6 months.

Correlations between each self-esteem sub-test of the PCSI and the gain in academic achievement are reported in Table 24. The first two columns report the mean gain in academic achievement when the pre-tests were used to identify low and high self-esteem; the second pair of columns identify mean gains in academic achievement when the post-tests were used to identify low and high self-esteem. For this analysis students in the guided groups and the non-guided groups were combined.

With the exception of the PCSI self-esteem sub-test of behavior, low self-esteem students generally achieved at a rate less than the high self-esteem students. The only other exceptionsto this generalization which can be observed appear in the pre-test sub-scale of academic ability (previously discussed) and in the post-test sub-scale of motivation.

Summary

Six components of self-esteem were measured by the Personal and Clerical Skill Inventory. These components related to behavior, clerical ability, academic ability, self-confidence, understanding self and others, and motivation. An analysis of the effect of the group

Table 24.--Combined group language and arithmetic achievement in months for the 15 students in each of the first and fourth quartiles as idenitifed by pre and post-PCSI sub-tests.

PCSI Self-Esteem Sub-Test	$\bar{X}$ Achievement Gain of Q_1 Students Pre-Test	$\bar{X}$ Achievement Gain of Q_4 Students Pre-Test	$\bar{X}$ Achievement of Q_1 Students Post-Test	$\bar{X}$ Achievement of Q_4 Students Post-Test
Behavior	6.9	5.5	8.3	5.8
Self-Confidence	4.5	8.1	4.5	7.2
Academic	7.6	6.2	3.5	8.5
Motivation	3.0	6.4	6.4	6.1
Clerical	4.0	9.6	4.6	6.5
Self-Understanding	5.7	7.7	5.6	8.0

guidance experiment upon the self-esteem of the guided group, as measured by the PCSI, tended to support the findings based on the TSCS; namely that the group guidance experience apparently exerted a negative influence on the self-esteem of members of the guided group.

Since the TSCS did not identify a component of self-esteem related to academic ability, a complete analysis was made of the data from this sub-scale of the PCSI in relation to actual gains in academic achievement. The post-test scores on the self-esteem of academic ability sub-scale were found to be more closely correlated to academic achievement than were the pre-test scores. When the post-test scores were used as the benchmark for self-esteem of academic ability, the anticipated results were realized; low self-esteem students of both the guided and non-guided groups achieved at a rate less than the high self-esteem students.

Summary of the Chapter

Analysis of the data of this experimental study failed to support the hypothesis that self-esteem and academic achievement of disadvantaged adult students could be positively influenced through group guidance experiences. Although the magnitude of change was not statistically significant at the .05 level, the group guidance experience appeared to exert a negative

influence upon the self-esteem of the guided group. This negative influence was similarly reflected in the academic achievement of the guided group.

The control groups, however, apparently were influenced positively by the CEP educational program at the Center. Partial correlations between the self-esteem and the academic achievement of the control groups were positively correlated with gains in academic achievement in both language and arithmetic.

Six secondary hypotheses were tested. The first predicted a difference in self-esteem for the seven control group students who dropped out of the CEP program, when their self-esteem scores were compared with those of the control group students who remained in the program. While the difference in self-esteem was not found to be statistically significant at the .05 level, the expectation that the mean level of self-esteem for the dropouts would be lower than that of the stay ins could not be rejected in light of the consistently lower TSCS mean scores of the dropouts.

The second secondary hypothesis predicted that the control group dropouts would differ significantly in academic achievement from the control group stay ins. This hypothesis was supported when the language scores on the Iowa Tests of Basic Skills were found to be significantly lower for the control group dropouts. The

difference in arithmetic achievement between the groups was negligible.

The third of the secondary hypotheses predicted a significant difference between the day and evening groups in both self-esteem and academic achievement. While the differences were not statistically significant on all self-esteem measures, the self-esteem of the day group appeared to be slightly, but consistently, higher than the self-esteem of the night group. The day group students reported significantly higher scores on the TSCS sub-test of Identity. The differences in academic achievement between the two groups were inconsistent.

The fourth of the secondary hypotheses rejected the prediction that the 59 disadvantaged adult Negro women in the research population would report levels of self-esteem below the mean of the norm group of the TSCS.

The fifth and the sixth secondary hypotheses investigated the relationship between self-esteem and the rate of learning. Students who were identified as having low self-esteem were seen to have achieved at a rate less than the mean of the research population in the academic areas of arithmetic and language. Students who were identified as having high self-esteem were seen to have achieved at a rate higher than the mean of the research population in language achievement and below the mean of the research population in arithmetic achievement.

Six additional sub-scales of self-esteem were identified by the Personal and Clerical Skill Inventory: behavior, self-confidence, academic ability, motivation, clerical ability, and self-understanding. An analysis of data from these six sub-scales of the PCSI supported the findings (based on TSCS self-esteem measurements) of the apparent negative influence exerted by the group guidance experience upon the self-esteem of the guided group.

One of the specific objectives of the group guidance program was to improve the understanding of self and others. Analysis of data of this PCSI sub-scale found that mean post-test scores of the guided group were actually lower than the pre-test scores of the group. It was concluded that the group guidance program had failed to realize this objective.

The PCSI identified an additional measure of self-esteem not included in the TSCS which was related directly to academic ability. The post-test scores of the sub-scale of self-esteem of academic ability were found to be more closely correlated to actual academic achievement than were the pre-test scores. When post-test scores were used as a measure of the self-esteem of academic ability, the low self-esteem students of both the guided and non-guided groups achieved at a rate less than the high self-esteem students.

In each of the remaining sub-tests of the PCSI, except for the pre and post-tests of behavior and the post-test of motivation, the anticipated correlations were found between low self-esteem and low academic achievement and between high self-esteem and high academic achievement.

CHAPTER VI

SUMMARY AND CONCLUSIONS

Summary

This study was designed to investigate experimentally the relationship between self-esteem and academic achievement in a population of disadvantaged adult students. A simple experimental design involving two experimental and two control groups was chosen. A group guidance "treatment" was given to the experimental groups. Pre and post measurements of self-esteem were obtained using the standardized Tennessee Self Concept Scale and an inventory which was designed by the researcher (Personal and Clerical Skill Inventory). Academic achievement was measured using the language and arithmetic achievement sub-tests of the Iowa Tests of Basic Skills.

A review of the literature of self-concept research found that a formalized theory of self-concept was beginning to develop. This research project was designed to investigate experimentally two principal hypotheses basic to self-concept theory. Six secondary hypotheses which formed the basis for the assumptions of this thesis were also tested.

The first primary hypothesis predicted that the self-esteem of disadvantaged adult students could be positively influenced through group guidance experience. Analysis of the data indicated that, although the magnitude of change was not statistically significant at the .05 level, the group guidance experience appeared to exert a negative influence upon the self-esteem of the guided groups.

The second primary hypothesis predicted an increase in academic achievement for the guided groups. When the self-esteem of the guided groups was not increased, it was not anticipated that the academic achievement of this group would increase. Further analysis revealed that a negative influence was reflected on the academic achievement of the guided groups.

Analysis of the data to test the six secondary hypotheses found a positive relationship between self-esteem and academic achievement in this population of disadvantaged adult students. This relationship was established by examination of the achievement of students with high self-esteem and the achievement of students with low self-esteem, and by comparing the self-esteem and the academic achievement of the guided and non-guided groups.

Analysis of the data to test the six secondary hypotheses found a positive relationship between self-esteem

and academic achievement in this population of disadvantaged adult students. This relationship was established by examination of the achievement of students with high self-esteem and the achievement of students with low self-esteem, and by comparing the self-esteem and the academic achievement of the guided and non-guided groups.

The dropouts from the control group were found to have lower self-esteem scores than the control group stay ins. The language achievement of the dropouts was significantly lower than the language achievement of the control group stay ins.

Day students were found to have higher self-esteem than evening students.

The economically and culturally disadvantaged Negro women in this study did not report low self-esteem. On the contrary, their self-esteem scores were found to be at or above the median level on all sub-tests of the TSCS.

Analysis of the data from the six sub-tests of the PCSI tended to support the findings of the Tennessee Self Concept Scale. The negative influence of the group guidance experience was similarly reported in these sub-tests. Correlations between low self-esteem and low academic achievement and between high self-esteem and high academic achievement were reported in each sub-test of the PCSI with the exception of behavior.

Conclusions

A positive relationship between self-esteem and academic achievement has been identified in a population of disadvantaged adult students. This relationship has been identified by the apparent negative influence of the group guidance experience upon the self-esteem and the academic achievement of the guided groups; by the small but positive relationship between self-esteem and academic achievement in the non-guided groups; by the comparatively low achievement of members of the research population identified as having low self-esteem; and by the comparatively high language achievement of those members of the research population who were identified as having high self-esteem.

This relationship has been established by research in other school populations. Studies by Bodwin, Clarke, Brookover, Fink, Coopersmith and others have identified positive relationships between self-esteem and academic achievement in populations of elementary, secondary, and college students. This research then, can be considered to support the conclusions of a rather large body of self-esteem studies which indicated that the student's academic achievement is related to the way the student feels about himself. It can be concluded that the positive relationship between self-esteem and academic achievement which has been identified at other

levels of education, is present in this population of economically and culturally disadvantaged adults.

The group guidance experience in this research project was designed to raise self-esteem. It was found that the opposite effect was realized: the self-esteem of the guided group appeared to be negatively influenced.

Other researchers have attempted to raise self-esteem. Tally,[1] working with eighth grade Negro students, observed a small but statistically insignificant improvement in self-esteem as a result of group counseling procedures. Thomas[2] found that self-concept of academic ability was not changed by using "outsiders," including counselors.

It can be concluded then, from the findings of this project and from other studies reported in the literature, that it is difficult to positively influence self-esteem in experimental situations. It also appears that the age of the experimental group is not the determining factor in the success of these projects.

Various techniques have been employed by the researchers in their attempts to raise self-esteem. Tally used group counseling. Thomas used counselors, experts, and significant others. Group guidance was used in this

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[1]Tally, op. cit.

[2]Thomas, op. cit.

project. While the theoretical base for the use of these techniques seems to be well established through the works of Lewin, Cartright and Zander and others, the effective use of these techniques to achieve desired outcomes in experimental situations remains in doubt. The findings of this study suggest that it may be easier to negatively influence self-esteem than it is to achieve the desired positive change.

In respect to the use of a technique to influence self-esteem experimentally, this project can only support the conclusion of Kagan, cited earlier, which observed that "some procedures with some populations will be successful in improving the client's attitude, grade point average, knowledge and behavior; and that other procedures will not be successful."[1]

Previous research in the area of adult learning had provided considerable evidence that adults can learn. In a comprehensive review of adult education research conducted in 1959, deS. Brunner concluded that "while the amount of schooling makes a difference in later learning, the educationally disadvantaged can and do learn."[2]

While the group guidance experience of this study failed to positively influence the achievement of the

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[1]Kagan, op. cit., p. 284.

[2]deS. Brunner, op. cit., pp. 22-3.

members of the guided groups of students, it was demonstrated, particularly through the effect of the total CEP program on the achievement and self-esteem of the unguided groups, that the educationally and culturally disadvantaged can learn. Hence, the project supports the conclusion made by deS. Brunner over ten years ago, that the culturally and educationally disadvantaged can learn. This conclusion also endorses the CEP educational program which was designed to be sensitive to the educational and psychological needs of the disadvantaged students at the McNamara Center.

Several studies were cited in the review of related research concerning the self-esteem of the disadvantaged. Miller[1] concluded that the disadvantaged could not be easily characterized in either motives, interests, aptitudes, or abilities. Derbyshire stated that "the disadvantaged have been denied educational, occupational, personal and financial success experiences by being excluded from the mainstream of American political and economic participation."[2] Although Derbyshire did not explicitly state it, it could be implied that the denial of these success experiences would serve to negatively influence the self-esteem of the disadvantaged.

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[1]Miller, op. cit.

[2]Derbyshire, op. cit., p. 3.

Grambs[1] felt that the self-esteem of the disadvantaged Negro was negatively influenced by both a color-caste complex and economic and cultural deprivation.

Rosenberg[2] suggested that self-esteem was related to social status.

It was assumed that the 59 Negro women in this study would report low levels of self-esteem. The analysis produced evidence to reject this assumption. The only conclusion which can be drawn from this analysis is that it is an error to generalize upon the level of self-esteem of economically and culturally disadvantaged adults. This conclusion generally supports the conclusion made by Miller[3] who stated that the culturally and economically disadvantaged did not compose a monolithic group.

Harding[4] found that dropouts have a significantly lower self-concept of academic ability than stay ins. The dropouts in this study were found to have consistently lower self-esteem scores than the stay ins. Although the magnitude of difference was not statistically significant, this finding is interpreted to support Harding's conclusion.

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[1]Grambs, op. cit., p. 13.

[2]Rosenberg, op. cit., p. 39.

[3]Miller, op. cit., p. 68.

[4]Harding, op. cit., p. 260.

These dropouts were also found to have significantly lower language achievement scores than the stay ins. It can be concluded that the lack of basic skills in language could have been a significant factor in a decision to drop out of the CEP program.

It was found, contrary to expectations, that the day students consistently reported higher levels of self-esteem than did the evening students. However, considering the small number of students involved, and the absence of randomization, the element of chance cannot be eliminated. Additional research is needed before conclusions can be drawn concerning differences in self-esteem between day and evening adult students.

Implications for Practice

This project has demonstrated that the self-esteem of disadvantaged adult students is related to their academic achievement. It has indicated that a short term group guidance experience could apparently negatively influence self-esteem; that this negative influence could be reflected in academic achievement. This appears to underscore the necessity for careful planning of all educational programs, for obtaining the most highly qualified people available to conduct them, and for continuous and careful evaluation of each program within a comprehensive curriculum.

One of the most encouraging findings of this project for administrators of adult programs for the disadvantaged was the effect of the total educational program upon both the self-esteem and the academic achievement of the research population. This conclusion was reached from data gathered from members of the control group, who in reality, were also involved in a "treatment" experience. It was observed that when disadvantaged adults return to school and are placed in an educational situation, they do indeed become involved in a "treatment" experience. The program, if well designed, can be expected to positively influence the self-esteem of the students. The data consistently revealed a positive influence upon the self-esteem scores of the control group which apparently was the result of the impact of the total supportive educational program at the McNamara Center.

For those who work with the disadvantaged, the finding of a relatively high level of self-esteem for the 59 Negro women comprising the research population of this study, probably comes as no surprise. Effective teachers and administrators of disadvantaged adult programs have generally recognized that disadvantaged adults respond to learning conditions much the same as other groups of adults. In adult learning, nothing breeds success like success, and there is no substitute for respect for the individual.

The identification of a significantly lower basic language skills achievement in the dropouts, and the conclusion that this deficiency could have had an effect on the decision to leave the program, has implications for practice. Adult educators may want to consider language skills a factor when they conduct empirical investigations on their dropout problems. This finding also underscores the importance of communication skills in programs for the disadvantaged. Further research is necessary, but new and innovative programs for the teaching of communication skills may be called for.

Implications for Further Research

Certain limitations of this research project have already been identified. In effect, both the guided and the non-guided groups were involved in a separate kind of "treatment." Since the initial, or pre-test measurements, were taken before the group guidance treatment began, but after all of the students were involved in the CEP program for at least six weeks, the pre-test wasn't a "pre" test in the strictest sense of the term.

The disadvantaged adult students in the research population have been identified as being a select group of students. They were referred to the CEP program, and this selective process alone could have been sufficient cause to raise their self-esteem.

The counselors for the group guidance project were identified as being experienced and professional teachers, but not experienced and professional counselors.

Hence, the first suggestions for further research calls for the replication of this study using a design to eliminate the four limitations mentioned above. It would prove helpful if two control groups were used; one composed of disadvantaged adult students enrolled in the program and the other composed of a matched group of adults taken from the welfare rolls. Pre-test measurements should be obtained before the educational program begins; post-test measurements should be taken at the conclusion of the program.

The self-esteem of the day students was observed to be higher than the self-esteem of the evening students in this project. This suggests the possibility that the time that a program is offered affects the self-esteem and the achievement of disadvantaged students. If this were the case, strong arguments could be developed against offering evening programs for disadvantaged adult students. The review of the literature failed to uncover related research on this question. Further research is necessary to confirm or to reject this possibility.

The dropouts from the non-guided group were found to be significantly lower in their mastery of basic language skills. Suggestions for descriptive research have

already been made. More experimental research is also needed to investigate the relationship between dropouts and the degree of their mastery of basic communication skills.

What effect does the selection process have on self-esteem? It could be predicted that those who are frequently chosen by peers, by teachers, by college admission, are the ones who have the highest self-esteem. Was the self-esteem of this research population higher after their selection for the CEP program? The replication of this study has already been called for, and the creation of a third control group would answer some of these questions.

Concluding Statement

While all of the questions have not been answered, and some of the issues remain in doubt, this project has been successful in clarifying some of the assumptions which have been made concerning the education of disadvantaged adults. The experiment was in reality, an evaluation of the effect of two programs; one centered around group guidance, and one based on the total curriculum of the CEP program at the McNamara Center. It is hoped that the findings and conclusions of this project will be of value to these administrators, to administrators of similar programs, and to those who are interested or involved in related educational research projects.

APPENDIXES

APPENDIX A

ANALYSIS OF COVARIANCE ON POST-TEST DATA

The following tables present data of the analysis of covariance for each of the sub-tests used in this study. Each sub-test was subjected to analysis in three separate categories: time, treatment, and interaction. The time category inspected for difference between the day group and the evening group; the treatment category inspected for difference between the control and experimental groups; and the interaction category inspected for difference between time groups and the treatment groups.

Table 25.--Analysis of covariance on post-test data: personal and clerical skill inventory

Source	Degrees of Freedom	Adjusted Sum of Squares	Adjusted Mean Square	F	Significance
Time	1	.3719	.3719	.7774	.382
Treatment	1	.1886	.1886	.3943	.533
Interaction	1	.0189	.1089	.0395	.843
Error	53	25.3555	.4784		
Total	56	25.9349			

Table 26.--Analysis of covariance on post-test achievement data: spelling.

Source	Degrees of Freedom	Adjusted Sum of Squares	Adjusted Mean Square	F	Significance
Time	1	69.952	69.952	.865	.357
Treatment	1	00.000	00.000	.000	.998
Interaction	1	2.587	2.587	.032	.859
Error	53	4285.994	80.868		
Total	56	4358.533			

Table 27.--Analysis of covariance on post-test achievement data: capitalization.

Source	Degrees of Freedom	Adjusted Sum of Squares	Adjusted Mean Squares	F	Significance
Time	1	475.656	475.656	5.140	.027
Treatment	1	17.305	17.305	.187	.668
Interaction	1	29.798	29.798	.322	.134
Error	53	4904.583	92.54		
Total	56	5427.342			

Table 28.--Analysis of covariance on post-test achievement data: punctuation.

Source	Degrees of Freedom	Adjusted Sum of Squares	Adjusted Mean Square	F	Significance
Time	1	75.388	75.388	.756	.388
Treatment	1	48.464	48.464	.486	.121
Interaction	1	1.197	1.197	.012	.914
Error	53	5285.010	99.72		
Total	56	5410.010			

Table 29.--Analysis of covariance on post-test achievement data: usage.

Source	Degrees of Freedom	Adjusted Sum of Squares	Adjusted Mean Square	F	Significance
Time	1	480.125	480.125	3.841	.055
Treatment	1	6.000	6.000	.048	.828
Interaction	1	46.250	46.250	.370	.545
Error	53	6625.141	125.003		
Total	56	7157.516			

Table 30.--Analysis of covariance on post-test achievement data: composite of language sub-tests

Source	Degrees of Freedom	Adjusted Sum of Squares	Adjusted Mean Square	F	Significance
Time	1	15.968	15.968	.615	.437
Treatment	1	9.243	9.243	.356	.553
Interaction	1	11.346	11.346	.437	.511
Error	53	1376.102	25.964		
Total	56	1412.659			

Table 31.--Analysis of covariance on post-test achievement data: arithmetic concepts

Source	Degrees of Freedom	Adjusted Sum of Squares	Adjusted Mean Square	F	Significance
Time	1	3.501	3.501	.048	.827
Treatment	1	29.685	29.685	.407	.526
Interaction	1	55.723	55.723	.764	.386
Error	53	3865.624	72.936		
Total	56	3954.533			

Table 32.--Analysis of covariance on post-test achievement data: arithmetic problem solving.

Source	Degrees of Freedom	Adjusted Sum of Squares	Adjusted Mean Square	F	Significance
Time	1	15.149	15.149	.366	.548
Treatment	1	.041	.041	.001	.982
Interaction	1	56.125	56.125	1.356	.249
Error	53	2193.646	41.390		
Total	56	2264.961			

Table 33.--Analysis of covariance on post-test achievement data: composite arithmetic sub-tests

Source	Degrees of Freedom	Adjusted Sum of Squares	Adjusted Mean Square	F	Significance
Time	1	1.351	1.351	.052	.820
Treatment	1	5.924	5.924	.228	.635
Interaction	1	33.258	33.258	1.280	.263
Error	53	1377.079	25.983		
Total	56	1417.079			

Table 34.--Analysis of covariance on post-test self-esteem data: physical self.

Source	Degrees of Freedom	Adjusted Sum of Squares	Adjusted Mean Square	F	Significance
Time	1	74.859	74.859	2.618	.112
Treatment	1	.029	.029	.001	.979
Interaction	1	59.715	59.715	2.086	.155
Error	53	1514.310	28.572		
Total	56	1648.913			

Table 35.--Analysis of covariance on post-test self-esteem data: moral self.

Source	Degrees of Freedom	Adjusted Sum of Squares	Adjusted Mean Square	F	Significance
Time	1	23.531	23.531	.525	.472
Treatment	1	15.284	15.284	.341	.562
Interaction	1	.036	.036	.008	.930
Error	53	2375.508	44.821		
Total	56	2414.359			

Table 36.--Analysis of covariance on post-test self-esteem data: personal self.

Source	Degrees of Freedom	Adjusted Sum of Squares	Adjusted Mean Square	F	Significance
Time	1	77.854	77.854	1.837	.181
Treatment	1	38.292	38.292	.905	.346
Interaction	1	.169	.169	.004	.948
Error	53	2242.543			
Total	56	2358.858			

Table 37.--Analysis of covariance on post-test self-esteem data: family self.

Source	Degrees of Freedom	Adjusted Sum of Squares	Adjusted Mean Square	F	Significance
Time	1	8.564	8.564	.175	.677
Treatment	1	104.720	104.720	2.136	.150
Interaction	1	15.516	15.516	.318	.575
Error	53	2593.539	48.935		
Total	56	2722.384			

Table 38.--Analysis of covariance on post-test self-esteem data: social self.

Source	Degrees of Freedom	Adjusted Sum of Squares	Adjusted Mean Square	F	Significance
Time	1	54.973	54.973	1.426	.238
Treatment	1	.038	.038	.001	.983
Interaction	1	14.262	14.262	.371	.545
Error	53	2037.531	38.443		
Total	56	2106.804			

Table 39.--Analysis of covariance on post-test self-esteem data: identity.

Source	Degrees of Freedom	Adjusted Sum of Squares	Adjusted Mean Square	F	Significance
Time	1	597.864	597.865	6.813	.012
Treatment	1	.176	.176	.002	.964
Interaction	1	2.283	2.283	.026	.873
Error	53	4652.962	87.792		
Total	56	5253.285			

Table 40.--Analysis of covariance on post-test self-esteem data: self-satisfaction.

Source	Degrees of Freedom	Adjusted Sum of Squares	Adjusted Mean Square	F	Significance
Time	1	130.394	130.394	1.279	.263
Treatment	1	377.938	377.938	3.707	.060
Interaction	1	55.214	55.214	.542	.465
Error	53	5399.969	101.886		
Total	56	5521.354			

Table 41.--Analysis of covariance on post-test self-esteem data: behavior.

Source	Degrees of Freedom	Adjusted Sum of Squares	Adjusted Mean Square	F	Significance
Time	1	3.713	3.713	.052	.821
Treatment	1	3.356	3.356	.047	.830
Interaction	1	110.680	110.680	1.549	.219
Error	53	3784.581	71.407		
Total	56	3902.330			

Table 42.--Analysis of covariance on post-test self-esteem data: total positive score.

Source	Degrees of Freedom	Adjusted Sum of Squares	Adjusted Mean Square	F	Significance
Time	1	913.769	913.769	1.676	.201
Treatment	1	347.558	347.558	.639	.428
Interaction	1	18.492	18.492	.034	.855
Error	53	28827.356	543.912		
Total	56	30107.356			

APPENDIX B

DOCUMENTS PREPARED BY THE RESEARCHER FOR THE STUDY

Two documents prepared for the project by the researcher are included here. The first is the Personal and Clerical Skill Inventory and the cover letter which introduced the project to the students at the McNamara Center. The Inventory is described in detail in Chapter IV. The second paper, "Some Impressions on Group Counseling," was written by the researcher in order to attempt to orient the counselors at the Center toward a group counseling approach. This group centered approach was not adopted by the counselors of the experimental groups and the resulting experimental treatment of the project is best described as a group guidance experience.

Personal and Clerical Skill Inventory

In cooperation with the administration here at the McNamara Skills Center, I am making a study of the program in which you are participating. It is hoped that this research study will help in improving the program.

You are invited to participate by responding to the items in the Tennessee Self Concept Scale and the Personal and Clerical Skill Inventory. Because it is believed that how you feel about yourself is important to your education, please respond frankly. However, you need not respond to any questions that you do not wish to answer. You can be assured that your responses will be held in complete confidence and that the results will be used only for research purposes.

Sincerely,

Ray Renbarger
Candidate for Ph.D. Degree
Michigan State University

Personal and Clerical Skill Inventory

Name_____

1. Compared with other clerical trainees at the Center, how do you rate yourself in the ability to learn the skill of typewriting?

    a. Among the best
    b. Above average
    c. Average
    d. Below average
    e. Among the poorest

2. Compared with other clerical trainees at the Center, how do you rate yourself in the ability to learn how to operate office machines other than the typewriter?

    a. Among the best
    b. Above average
    c. Average
    d. Below average
    e. Among the poorest

3. Compared with other clerical trainees at the Center, how do you rate yourself in the ability to spell?

    a. Among the best
    b. Above average
    c. Average
    d. Below average
    e. Among the poorest

4. Compared with other clerical trainees at the Center, how do you rate yourself in the ability to correctly punctuate business letters.

    a. Among the best
    b. Above average
    c. Average
    d. Below average
    e. Among the poorest

5. Compared with other clerical trainees at the Center, how do you rate yourself in the ability to solve arithmetic problems?

    a. Among the best
    b. Above average
    c. Average

d. Below average
e. Among the poorest

6. Compared with other clerical trainees at the Center, how do you rate yourself in the ability to keep records?

a. Among the best
b. Above average
c. Average
d. Below average
e. Among the poorest

7. How do you rate yourself in the following orders given by your teacher or supervisor compared with other clerical trainees at the Center?

a. Among the best
b. Above average
c. Average
d. Below average
e. Among the poorest

8. How do you rate yourself in following directions given by the teacher or supervisor compared with other clerical trainees at the Center?

a. Among the best
b. Above average
c. Average
d. Below average
e. Among the poorest

9. Compared with other clerical trainees at the Center, how do you rate your ability to work with other people?

a. Among the best
b. Above average
c. Average
d. Below average
e. Among the poorest

10. Do you think that you will be better able to find a job than other clerical trainees at the Center?

a. Yes, definitely
b. Yes, probably
c. Not sure, either way
d. Probably not
e. No

11. How do you rate your ability to keep a job, compared with other clerical trainees at the Center?

    a. Among the best
    b. Above average
    c. Average
    d. Below average
    e. Among the poorest

12. How do you rate yourself in being on time to class compared with other clerical trainees at the Center?

    a. I am among the best
    b. I am above average
    c. I am average
    d. I am below average
    e. I am the poorest

13. Do you feel you will get promotions faster in your job than will other trainees at the Center?

    a. Yes, definitely
    b. Yes, probably
    c. Not sure, either way
    d. Probably not
    e. No

14. Compared with other clerical trainees at the Center, how do you rate your understanding of "what makes other people tick?"

    a. Among the best
    b. Above average
    c. Average
    d. Below average
    e. Among the poorest

15. How do you rate your ability to accept responsibility as compared with other clerical trainees at the Center?

    a. I am the best
    b. I am above average
    c. I am average
    d. I am below average
    e. I am the poorest

16. Compared with other clerical trainees at the Center, do you feel your understanding of "what makes you tick" is:

    a. Among the best
    b. Above average
    c. Average
    d. Below average
    e. Among the poorest

17. How do you rate your desire to get ahead in life, compared with other clerical trainees at the Center?

    a. Among the best
    b. Above average
    c. Average
    d. Below average
    e. Among the poorest

Some Impressions on Group Counseling

Group counseling uses the group process as a problem solving and opinion changing technique. Problems common to the members of the group are discussed. Total participation is encouraged and through interaction with each other's ideas, the group comes to support its individual members. Group members come to see that their problems are not unique, that their feelings are not unknown to others. Shared solutions to common problems open new avenues of thought to other group members. Out of the total process of discussing interaction and reaction, close personal relationships develop stimulating empathy, sympathy, and concern for others, and the realization that the individual is not alone in the world.

The role of the counselor in group counseling can change from one situation to another. In an unstructured group, the counselor stays completely in the background, forcing leadership to emerge from within the group. He then serves to observe, to feed back, and to interpret the feelings that are expressed.

In a more structured situation, the counselors serve in an expanded role. He may serve to initiate and

to guide discussion as well as to feed back and interpret the responses of the group.

I see the counselors with the experimental groups structuring the discussion as described above. The goal of the personal adjustment program is well defined: To help the individual understand himself and others so that he will satisfactorily make adjustments necessary in the process of living and working. Counselors could lead discussions around topics of interest to the students involving the basic needs of humans ie., security, a sense of worth, agreeable relationships with others, religion, freedom and independence, conformity and success. Emotions common to humans could also be discussed; fear, anger, anxiety, frustration, and the reactions that these stimulate in people. Discussion could also include topics of a more personal characteristic, in grooming, health and essential work habits.

I feel that these group counseling sessions will help achieve the goal of the personal adjustment program and in so doing will build self-esteem and self-confidence in individual group members.

APPENDIX C

CORRESPONDENCE

The correspondence included in this appendix charts the progress of the development of the research project. The July 17, 1967 letter was a response to an initial interview with Mr. Ray Ferrier. In this interview a preliminary outline of the porject was discussed. Mr. Ferrier suggested the McNamara Skills Center as a possible research site. Subsequent telephone conversations and interviews with Mr. George McWatt, Principal; Mr. Al Capaferi, Supervisor of Basic Skills; and Mr. James Garret, Supervisor of Personal Adjustment and Records were successful in both gaining the necessary permission to undertake the study at the Center and in completing the design of the study. Final approval was given to the project by the administration of the Detroit Public Schools in the memo of January 4, 1968.

Following the acceptance of the research proposal on December 6, 1967 by the researcher's guidance committee an application for federal funding through the Small Research Program was submitted. The three letters of March 20, May 21, and May 27, 1968 describe the action

taken on this application. Although the project was approved for funding, complications not entirely understood by the researcher intervened and a financial contract was not negotiated.

The three letters of April 24, 1968 expressed the appreciation of the researcher to Mr. McWatt, Mr. Molter and Mr. Garrett for their cooperation in the project.

The final three letters of September 13, September 30, and October 3, 1968 report correspondence with Dr. William Fitts, author of the Tennessee Self Concept Scale. The researcher is grateful to Dr. Fitts for the interest he has shown and for his suggestions.

NORMAN DRACHLER
Superintendent of Schools

CHARLES J. WOLFE
Executive Deputy Superintendent

CARL L. BYERLY
Associate Superintendent

DETROIT PUBLIC SCHOOLS
DIVISION OF CURRICULUM DEVELOPMENT, INSTRUCTIONAL AND EDUCATIONAL RESEARCH
IMPROVEMENT OF INSTRUCTION

DETROIT PUBLIC SCHOOLS CENTER • 5057 WOODWARD • DETROIT, MICHIGAN 48202 • PHONE 833-7900

CONTINUING EDUCATION DEPARTMENT

GEORGE H. OWEN, Divisional Director
D. RAY FERRIER, Director, Adult Education
CHARLES E. STEWART, Director, Teacher Education

July 17, 1967

Mr. Ray Renbarger
Owen Hall, Room E 450
Michigan State University
East Lansing, Michigan

Dear Mr. Renbarger:

I enjoyed talking to you last Thursday and have reviewed the written description of your thesis proposal. It is very interesting.

I am sure that Dr. George Owen, my immediate superior, as well as other members of the Detroit staff, would enjoy discussing details with you when you are ready to take the next step. Since the Detroit Public Schools receives many requests for research assistance, the usual procedure is to arrange for a meeting with the Educational Research Department, the participating Detroit Public Schools Department, and the researcher. At this meeting the proposal is considered, and comments, reactions, and reservations are exchanged. This is followed by an official statement regarding cooperation.

I am sure this may sound somewhat more formidable than it really is. Most researchers in the past have found these intervening procedures to their advantage in bringing a dimension of reality basing to their proposal as well as sharpening up details which may be somewhat nebulous. I would enjoy hearing from you after you have discussed details with your advisor at either the Stevenson Building or by phone (931-2400, Ext. 146).

Sincerely,

Ray Ferrier, Director
Continuing Education Department

bw

SUBJECT: Approved Research Study Research Study No. 68001

FROM : Robert S. Lankton, Divisional Director, Research and Development Department, Office for Improvement of Instruction

TO : Mr. George McWatt, Principal, McNamara Skills Center

DATE : January 4, 1968

The research study identified below has been reviewed and approved by the Research and Development Department in accordance with the statement of policy in the Administrative Handbook. Participation by individuals or by schools in this project is entirely voluntary.

Please return the tear-off portion of this letter to indicate whether your school will be able to participate in this study. If you are willing to participate, the research worker named below will contact you to make arrangements for the study in your school.

If you desire further information, please call John Andary of the Research Department, 931-2400, extension 9.

Name of research worker: Ray Renbarger, Assistant Principal, Oak Park High School, Doctoral Student, Michigan State University

Title of project: An Experimental Study of the Relationship Between Self-Esteem and Academic Achievement in a Population of Disadvantaged Adults

Procedures:

1. The investigator will pretest the approximately 80 adult students who are enrolled in the Concentrated Employment Project at the McNamara Skills Center. The instruments to be used are the Tennessee Self-Concept Scale, the Iowa Tests of Basic Skills, and a personal inventory developed by the researcher.

2. The McNamara Skills Center personal adjustment and counseling staff will counsel 40 of the CEP students. These 40 students (the experimentals) will participate in 36 small group counseling sessions.

3. At the end of the skills training period and the group counseling sessions, the investigator will administer posttests to all 80 students. The instruments will be the same as those listed in step 1.

----------TEAR SHEET----------

SUBJECT: Research Study No. 68001

FROM : _____, Principal, _____ School

TO : Robert S. Lankton, Divisional Director, Research and Development

DATE : _____, 1968

Our school is ☐ able and willing ☐ unable or unwilling to participate in this study.

OFFICE OF EDUCATION

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
REGIONAL OFFICE
REGION V
433 WEST VAN BUREN STREET, ROOM 712
CHICAGO, ILLINOIS 60607

March 20, 1968

Mr. Ray N. Renbarger
Doctoral Candidate
Michigan State University
East Lansing, Michigan 48823

Dear Mr. Renbarger:

This is to acknowledge receipt of your proposal submitted to the Small Research Program. The proposal has been assigned Number: 8-E-114 . Please refer to this number in any subsequent communications. You will be informed of the disposition of this proposal following its review, evaluation, and approval by the Acting Regional Assistant Commissioner.

NOTE: IT IS APPROPRIATE THAT YOU BE AWARE THAT DUE TO A SHORTAGE OF FUNDING THIS FISCAL YEAR, EVEN THOUGH THE PROPOSAL IS DEEMED WORTHY OF SUPPORT, IT MAY NOT BE POSSIBLE TO FUND IT.

No information regarding the status of this proposal can be released prior to a decision relative to a disposition recommendation.

Thank you for your interest in the Small Research Program of the Bureau of Research.

Sincerely yours,

Joseph A. Murnin

Joseph A. Murnin, Director
Educational Research, Region V

JAMurnin:gbc

cc: Dr. Kleis
Dr. Philip May

NOTE: Principal Investigator: please complete the application form and return in the self-addressed envelope enclosed for your convenience.

May 21, 1968

M. R. Pierson
Assistant Treasurer
Michigan State University
East Lansing, Michigan 48823

Dear Mr. Pierson:

It is a pleasure to inform you that Project No.: 8-E-114, entitled:

"An Experimental Study of the Relationship Between Self-Esteem and Academic Achievement in a Population of Disadvantaged Adults"

under the direction of Mr. Ray N. Renbarger, has been approved contingent upon the negotiation of a mutually acceptable grant.

The principal investigator and the business officer of your institution will be contacted in the near future for the purpose of negotiating Project No.: 8-E-114.

Please do not make a public announcement of this information prior to notification by the U. S. Office of Education.

If I can be of further assistance, please let me know.

Sincerely yours,

Joseph A. Murnin, Director
Educational Research, Region V

JAMurnin:gbc

cc: Mr. Renbarger
Dr. Russell J. Kleis

Enc. 1

NOTE: Mr. Renbarger - we have not received the formal application form sent you with acknowledgement on the 20th day of March 1968.

27
May
1968

Joseph A. Murnin, Director
Education Research Region V
Department of Health, Education and Welfare
433 West Van Buren Street, Room 712
Chicago, Illinois 60407

Dear Mr. Murnin:

I was extremely pleased to receive notification that my research, Project No. 8-E-114, has been approved for funding. I have made preliminary arrangements to meet with Mr. Greider from Michigan State University for the purpose of negotiating a mutually acceptable grant.

You noted on my copy of your May 21st letter to Mr. M. R. Pierson that you had not received the formal application form. I completed the form and mailed it to you in your envelope on May 1st. If the form has been misrouted - I would be pleased to fill out another.

I have been advised by Michigan State University to notify you of my home address, since I am no longer in residence at the University. My home address is - 28517 Kirkside Lane, Farmington, Michigan 48024.

Sincerely,

Ray Renbarger

cc. Dr. Russell Kleis

April
1968

Mr. George McWatt, Principal
Patrick McNamara Skills Center
1501 Beard Street
Detroit, Michigan 48209

Dear Mr. McWatt:

This is to formally express my appreciation to you, Mr. Molter, Mr. Garrett, and to all of the C.E.P. students for your assistance and cooperation in helping me complete my doctoral requirements.

I am particularly grateful to Mr. Molter and Mr. Garrett, who have given me counsel in both the design and implementation of the data gathering procedures. Their courtesies have made me feel a part of the Skills Center staff, and represent the highest degree of professional service.

The students of C.E.P. were most cooperative. They subjected themselves pleasantly, cooperatively, and sincerely to approximately three hours of pre-testing and to three hours of post-testing. They are beyond a doubt, one of the finest groups of adults with whom I have been privileged to work.

My work is far from finished. The next immediate step will be to get the data in computerized form and to subject it to statistical tests through the use of a computer. I will also need to contact the Center in the near future for some additional data on the program and on the C.E.P. students.

I know that you are most anxious to see the results of the experiment that we have just concluded. I will forward to you interim reports, as fast as they are completed. Please feel free to call upon me at any time for a presentation of these reports to any interested groups.

Again, let me say that I am greatly in debt to you and that I am most grateful for your cooperation.

Sincerely,

Ray Renbarger

24
April
1968

Mr. Albert Molter, Supervisor
Clerical Skills Department
Patrick McNamara Skills Center
1501 Beard Street
Detroit, Michigan 48209

Dear Mr. Molter:

This is to formally express my appreciation to you and to all of the C.E.P. students for your assistance in helping me complete my doctoral requirements. Your help and guidance in the formulation of the questionnaire, in reaching the decision of which tests to administer, and your cooperation in scheduling the time and place of the testing sessions provided the assistance which made this study possible. I am also appreciative of the many courtesies extended to my by Mrs. Rainwater and Mrs. Beasley and to all of the C.E.P. clerical staff personnel for permitting the interruptions to their classes for the original testing periods and for the make-up sessions.

I have learned that a research project of this kind requires the help of many people. Certainly no one has assisted me more than have the personnel of the McNamara Skills Center. I shall forever be indebted to you.

Sincerely,

Ray Renbarger
RRgp

cc: Mr. McWatt

24
April
1968

Mr. James Garrett
Detroit Council of Organizations
8329 Grand River
Detroit, Michigan

Dear Mr. Garrett:

This is to formally express my appreciation to you and to all of the C.E.P. students for your assistance in helping me complete my doctoral requirements. Your help in designing the experiment, and in providing the group guidance to the experimental group through the P.A.R. Program was the integral part of this project. My thanks are also extended to Mr. Hotchkiss and Miss Chapman for their efforts.

I have learned that a research project of this kind requires the help of many people. Certainly no one has assisted me more than have the personnel at the McNamara Skills Center. I shall forever be indebted to you.

I know that the staff at the Center has experienced an irreplaceable void when you left to assume your new responsibilities. My best wishes are extended to you for continued success in your new position.

Sincerely,

Ray Renbarger
RRgp

cc: Mr. McWatt

NASHVILLE MENTAL HEALTH CENTER

PHONE 297-3571 · 2410 WHITE AVENUE · NASHVILLE, TENNESSEE 37204

September 13, 1968

Ray N. Renbarger
1660 Columbia
Berkley, Michigan 48072

Dear Mr. Renbarger:

As the author of the Tennessee Self Concept Scale, I am attempting to keep up with the work done with this instrument. In checking the orders from the publisher and our own correspondence file I find that you have, or were considering, utilizing this scale. Could you inform me as to the uses you have made, or are making, of the TSCS?

We are carrying out a broad self concept research program here at this Center. We are particularly interested in research projects--either completed, underway, or planned--with the TSCS (by you, or anyone else that you might know about). Reprints of published articles, papers, copies of theses or dissertations, or references to any completed work would be particularly appreciated as we are attempting to compile a complete bibliography of all TSCS references. We are also completing a technical report which will summarize all of the research with this instrument and we are also serving as a clearing house for TSCS research. We would, therefore, appreciate any information about studies currently underway. On many occasions, we have been able to interchange data with other researchers, or refer them to other workers who are doing something in the same area.

We are also interested in any other uses which people are making of the TSCS. A large data bank of TSCS records, classified according to specific psychiatric diagnosis, is accumulating here. We would appreciate any contributions to this data pool and, in turn, will be glad to share these data with others wherever possible. Other data banks by occupation, physical handicaps, etc., will probably be established in the future. We also plan to issue periodic research bulletins regarding our work. One bulletin which outlines our research program is already available. We will be glad to send these bulletins to any interested parties.

I appreciate your interest in the TSCS and will also appreciate any response you can make to this letter. If I can be of any assistance to you in any way, please feel free to call on me.

Sincerely,

William H. Fitts

William H. Fitts, Ph.D.
Director of Research

nm

Oak Park High School - 13701 Oak Park Boulevard

30
September
1968

Dr. William H. Fitts
Nashville Mental Health Center
2410 White Avenue
Nashville, Tennessee 37204

Dear Dr. Fitts:

This is in response to your letter of September 13, 1968 inquiring about the use that I made of the Tennessee Self-Concept Scale. I have enclosed a copy of the proposal of my research project for your inspection.

Briefly, my project was an experimental investigation of the relationship of disadvantaged adults. I measured self-esteem by using the TSCS and by an instrument that I developed called the "Personal and Clerical Skill Inventory." Academic Achievement was measured by the Iowa Tests of Basic Skills.

After pre-testing, the experimental group was involved in an eleven week group guidance experience designed to increase self-esteem. An analysis of covariance of the post-test data failed to support hypotheses predicting a significant difference in self-esteem and academic achievement between experimental and control groups.

My dissertation is currently in draft stage. As soon as it is approved, I will send you a copy for your files.

Sincerely,

Ray Renbarger
Assistant Principal

RRgp

PHONE 297-9571 · 2410 WHITE AVENUE · NASHVILLE, TENNESSEE 37204

October 3, 1968

Mr. Ray Renbarger
Assistant Principal
Oak Park Schools
13900 Granzon
Oak Park, Michigan 28237

Dear Mr. Renbarger:

Thank you for your letter describing your research project with the Tennessee Self Concept Scale. I will certainly look forward to receiving a copy of your dissertation and adding it to our growing list of references on the TSCS. It is difficult for me to tell for certain just what your results were and I am anxious to see the actual dissertation. For example, I am not sure whether there was no significant increase in self esteem in your experimental group, or whether the control group also increased, or whether changes in self concept were unrelated to changes in achievement. I do know, however, that the self concept, as measured by the TSCS, does not change very readily and that other studies on the effects of group guidance often fail to show any appreciable change. One reason for this seems to be the fact that individual subjects are often changing in opposite directions. For example, some subjects with unusually high (and perhaps unrealistic) self concepts often show decreases while those who are low initially may show an increase or simply have their original negative picture confirmed and become even more negative. I am sure that, if your dissertation is in final stages, you are not interested in doing any additional work with your data. Nevertheless, at some time you might like to take another look at these data and see if you find anything different by separating your subjects in a different way. You might do this by comparing those subjects who did increase in self esteem with those who did not (and it might even be interesting to do this with your control subjects). I am convinced that there is a relationship between self concept and achievement and many other studies do show this, but that this relationship is often clouded by many other things. Also, and even where the self concept does improve, it probably takes a period of time before such changes actually manifest themselves through increased performance levels. As a matter of fact, it may well work the other way around. You might even be interested at some time in turning the whole study around and looking at the effects on self

Mr. Ray Renbarger
Oak Park, Michigan
Page - 2 -

concept for those subjects who showed the greatest increase in achievement.

As you can see, I have found your study to be one of considerable interest and I do hope you will be able to send me a copy of your dissertation. Thank you again for your letter and the enclosed proposal and if I can ever be of any assistance to you, please feel free to call upon me.

Sincerely,

William H. Fitts

William H. Fitts, Ph.D.
Director of Research

nm

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