A COMPARISON OF CAREER MATURITY, SELF-ESTEEM, AND LOCUS OF CONTROL BETWEEN STUDENTS ENROLLED AND STUDENTS NOT ENROLLED IN A CLUSTERS APPROACH TO CAREER ORIENTATION CLASS/

by

Nancy K. Hart

Dissertation submitted to the Graduate Faculty of the

Virginia Polytechnic Institute and State University

in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

in

Supervision

APPROVED:

Houston Conley, Co-chairman	Anita Webb, Co-chairman
Jim Fortune	Joe Blake
David Alexander	

November, 1977

Blacksburg, Virginia

ACKNOWLEDGEMENTS

I am grateful to many individuals for the assistance and support they gave me while I was working on this investigation. I owe a special debt of gratitude to the members of my graduate committee: to Dr. Houston Conley, who began serving as chairman of my doctoral committee, for his direction of this dissertation and for his understanding and guidance; to Dr. Anita Webb, who assumed the duties of co-chairman of this committee, for her constructive critical evaluation of this study and for her patience and encouragement; to Dr. Jim Fortune for his assistance with the research design and interpretation of the data and for his unfailing patience and understanding; and to Dr. David Alexander and Dr. Joe Blake for their assistance. support, interest, and helpful suggestions in all phases of this endeavor. I will be forever indebted to each of these committee members for their expertise, understanding, and the time and energy they spent in providing assistance when it was needed.

I am grateful to the Russell County School System, and especially to Mr. David C. Musick, Division Superintendent of the Russell County Schools who, in so many ways, made it possible for me to complete this study. I am also grateful to Dr. Donald Smith, Dr. Harold Van Hook, and Dr. Daisy Campbell, professional friends from Southwest Virginia Community College, who provided encouragement and assistance throughout this study. To Sexton Burkett, a personal friend, I extend sincere appreciation for his many helpful suggestions.

I am grateful to the students and teachers from Woodlawn and Hillsville Intermediate Schools who participated in this study. Further appreciation is extended to Ms. Janice McBee, a fellow graduate student, who gave invaluable assistance in this research, and to Mrs. Sally Marshall, the dissertation typist, who was excellent in her efficiency and her patience.

To my family, who made this endeavor worthwhile, I owe my greatest debt of gratitude. I could not have completed this undertaking without the constant help, understanding, and encouragement from my son, Stanley, my daughter, Melanie Cheryl, and especially from my beloved grandmother, Pearl.

TABLE OF CONTENTS

LIST OF TABLES

Chapter 1

INTRODUCTION

Career development has been identified as a legitimate concern of education for several years. The career education movement, its roots dating back to the early sixties, has brought such a concern to the attention of educators and the general public as well. Theories of occupational choice and career development have been postulated by occupational psychologists since Ginzberg's initial work in 1951. The contributions have continued as professional guidance and vocational experts such as Donald Super, Henry Borrow, Edwin Herr, Martin Katz and John Holland have theorized about the need to make a student's learning experiences relevant to the real "world of work."

As a concept and as an innovation in American education, career education was formally initiated in January, 1971, when Dr. Sidney P. Marland made "career education" the password of his administration and launched an intensive nationwide effort to implement local school system programs (Goodman, 1971). In response to the influence of the United States Office of Education, school systems throughout the nation implemented some form of career education. Various sources of information have indicated that career education programs have now been developed in five thousand of seventeen thousand school districts across the nation (U.S.O.E., 1974). According to a United States Office of Education (1976) funded study, the broad goals of career

education have been achieved to some extent in every state as a result of career education projects.

At the local level the rapid expansion of programs has been matched by the number of different approaches implementing career education goals. Each system has individualized its approach according to its needs and resources. The structure of the school system, timing of decision points, and cultural expectations have affected the development of career education programs (Herr, 1972). Other factors affecting the difference in approaches have been due to the source and amount of funding, time committed to instruction, materials developed for instruction, and the form of curriculum involvement.

The period between 1968 and 1972 saw an increase in the awareness of vocational education and career development, coupled with legislation which, for the first time, gave vocational educators a degree of flexibility. The emphasis upon vocational guidance and career development resulted in a diverse number of middle/junior high school "exemplary" programs.

A number of approaches, therefore, were used by educators to develop career education programs to provide assistance to junior high school students in studying the various aspects of occupational information, career planning, and relating this data to future educational-occupational planning. Programs using the "cluster" concept as their model have been implemented in various ways. In the approach used by Clusters Approach to Career Orientation, classroom study is combined with work experience. Thus far flexibility, freedom, and indivuduality

seem to have been the key elements of current efforts to blend career education into the school curriculum at the junior high school level (Macchia, 1975).

The goals and purposes of career education, although expressed in a variety of ways, share the commonalty of assisting the student's meaningful entry into the world of work. Hoyt (1975) stated that the two basic goals of career education are (1) to help all individuals understand and capitalize on the increasingly complex and changing relationships between education and work, and (2) to make work become a more personally meaningful part of the total lifestyle of all individuals.

The constantly changing world of work has required that societal members be educated not only for a specific job, but also in the broader area of career education skills. Olson (1974) noted that the purpose of career education is to help students become more responsible individuals who are capable of making and implementing accurate career choices in an exceedingly complex and continuously changing society.

Schools have long been accused of "ivory towerism." Hoyt (1974) attested to this estrangement of education from reality when he said that our educational institutions have operated for years under a false assumption that the best way to prepare youth for the world of work is to lock them up in a school house and keep them away from that world. In order to prevent students from becoming alienated from education because they do not see the relationship between their

schooling and the world of work, Passow (1975) and Macchia (1975) suggested that school curricula should be revised to provide students with a wide range of activities making work a more central component of the education of adolescents.

Career education has, increasingly, attempted to approach the whole person by focusing the total educational experience on the student and his position in the world of work. Gysbers and Moore (1975) have stated that because of the increasing complexity of society, it is no longer possible to separate one role, event, or setting from another. Consequently, they propose that the meaning of career be expanded to include an individual's total life. Jones, Hamilton, Ganschow, Helliwell, and Wolff (1972) have included patterns of personal choice related to an individual's life style within the concept of career. These patterns involve occupational, educational, learning and social/personal behavior, social responsibility, and leisure activities. Career education today is far removed from the simplistic Parsonian version of vocational counseling which emphasized the influence of personal values (Gysbers and Moore, 1975).

If career education is to remain relevant and viable, it must include a concern for the development of a positive self-concept and the examination of life styles and occupations. In addition, an examination of the interplay between these factors and their relationship to self-concept development must be explored (Ryan, 1975).

Purpose of the Study

The purpose of this study was to provide empirical data resulting from a comparison of seventh-grade students enrolled in CACO and students not enrolled in CACO in order to determine if the Clusters Approach to Career Orientation had any significant effect on the student's career maturity, self-esteem, and locus of control (independent/responsible behavior).

Educators have long realized that the majority of junior high school students have not developed clear educational and vocational goals. At this age students are unusually vulnerable to the inter-related academic, personal, and peer pressures. Self-understanding and vocational guidance are particularly crucial at this time (Medsker and Tillery, 1971). Ginzberg (1951) stated that no adolescent ever makes an occupational choice alone, but the important question is whether he gets the right kind of help. Research seems to suggest that we have moved toward a laissez-faire attitude toward career decision making within the family. It is not enough for parents to say to their youngster, "You make any choice you want. All I want is for you to be happy." (Ginzberg, 1951). The child needs a high degree of freedom, but he also needs assistance in delimiting the unknown. This study was undertaken to determine if any occupational orientation course such as CACO is helping to fill this gap in the dissemination of career information to youngsters.

Need for the Study

This study focused on the effects of the Clusters Approach to Career Orientation of middle school youth for several reasons. According to the findings of McDaniels (1968), Super (1960), and Herr (1972) junior high school youths are extremely needy and ready for assistance in preparing for adult roles. Because these youth are at a critical stage in their development, self-understanding and career guidance are necessary (Medsker and Tillery, 1971). Assistance and decisions made at this time are directionally more important in determining developmental patterns than at any other period. Choices made and options undertaken at this time have a far reaching impact on later education and employment opportunities.

McConnel (1967) has stated that if students are to make vital choices wisely they must be assisted in identifying their abilities and aptitudes, in assessing their deficiences and their potentialities, and in rationalizing their aspirations. In other words, it is the responsibility of the educational institution to develop the overall consciousness of the individual. Additionally, a primary need of many students is to build self-confidence so that they believe they can be successful (McConnel, 1967). Too many job failures result from job dissatisfaction due to a worker's having received poor guidance or having grabbed anything that was available. Consequently, if a single group of students is to be singled out for career education preparation, middle school youth would be a most appropriate and logical choice (Swann, 1976).

The Virginia State Department of Education, the Department of Vocational Education and the Standards of Quality have all emphasized that career education should be provided to students in the public schools. At the present time there are many types of career education programs in existence. Administrators want to know the advantages and disadvantages of the various approaches to career education. Educators require information for program selection and implementation, and counselors seek a means of assessing needs prior to educational and vocational counseling. State and local educational agencies, in considering career education curriculums, need to know the effect of career education programs on students (U.S.O.E., 1976).

Knowledge of the relationship of these variables of career maturity, self-esteem, and locus of control may provide educators with suggestions for curriculum changes as well as to provide information on the current status and relationship of these variables. It seems particularly relevant to determine if career education programs may enhance self-esteem and independent/responsible behavior. Further, this investigation will add to the general fund of knowledge of adolescent development.

The Clusters Approach to Career Orientation (CACO) is a relatively new program, as this is only the third year of its existence. In the development of the Clusters Approach to Career Orientation, the Division of Vocational Education, State Department of Education, Commonwealth of Virginia, pioneered the movement for career orientation on a statewide basis (Dugger, et al., 1975). After

identification of the need for a course to orient students to the world of work, personnel within the state vocational division made plans for the development of such a curriculum. The middle school/ junior high school was chosen as the area of implementation, an orientation course incorporating the clusters system was chosen as the vehicle, and Virginia Polytechnic Institute and State University was chosen to conduct this research.

An evaluation of the Clusters Approach to Career Orientation, which was funded by the State Vocational Research Division, is being undertaken to determine if it is actually accomplishing the stated goals (Dugger, et al., 1975). If the evaluation indicates that CACO is, indeed, accomplishing these goals, then this course can also be used by local school divisions to meet the requirements relating to the Standards for Accrediting Elementary and Secondary Schools (Dugger, et al., 1975).

A study of the effects of CACO on student change needs to be undertaken, in addition to the evaluation being conducted by the directors of CACO. This study will furnish educators with additional and necessary information about the program which they need as they attempt to choose the type of career program to best meet the needs of students.

Objectives of the Study

The objectives of this study were to compare the variables of (1) career maturity, (2) self-esteem, and (3) locus of control between seventh-grade students who have participated in the Clusters Approach

to Career Orientation and students who have not taken this class. Specifically, the objectives were:

1. To determine the impact of CACO on the student's career aspirations and resulting career maturity. A major purpose of CACO is to assist individuals in gaining insights and competencies which will allow them to relate realistically to career development, thus facilitating independent planning and decision making. The individual is encouraged to deal with the many facets of career choice from a number of perspectives. Adjustment is an outcome toward which CACO is directed. This study, consequently, sought to determine if this program imparts to the individual the knowledge of self and of careers necessary for him to arrive at a compatable career choice.

2. To determine the impact of CACO on the student's self-esteem. Coopersmith (1967) in his study of self-esteem concluded that individuals with low self-esteem lack the capacity to define and to deal with their environment, but they may learn to do so more rapidly and efficiently if they are exposed to more effective methods of operating. Coopersmith's (1967) studies indicated that a structured setting, such as the CACO program, in which an individual is aided in examining his basis for evaluation in terms of his self-esteem and capacities may be conducive to positive self-concept development. Therefore, an attempt was made to determine if positive changes in self-esteem occur with students participating in the CACO program.

3. To determine change in locus of control, (independent/responsible behavior), after students have undergone the CACO

experience. If an individual feels he has power to take charge of his own life and if he acts on this belief it is thought that his behavior should be apparent. This area also relates directly to a positive self-concept. Persons who have low self-esteem are not likely to exhibit independent behavior. Although all persons are to some extent under the influence of others, it is felt that the individual who is personally empowered is relatively detached from outside forces of appraisal, and relies more on himself in making decisions and taking responsibility for himself. In contrast, the dependent person is insecure, uncertain, and requires the "reassurance of external confirmation and appraisal" for direction and decision-making (Coopersmith, 1967). Thus, change in independent responsible behavior is thought to be positively related to personal empowerment and consequently will be examined.

"Education, e-ducere," means to lead forth, to develop--in other words, to assist the individual to emerge in the adult world as an effectively functioning adult (Super, 1957). This investigation will attempt to determine if the Clusters Approach to Career Orientation is of assistance in this process.

Hypothesis

The purpose of this study was to compare groups participating and not participating in the Clusters Approach to Career Orientation on scores of career maturity, self-esteem enhancement, and locus of control. For statistical purposes, the hypothesis is stated in the null form.

There will be no significant difference in the group participating in CACO and the group not participating in CACO in terms of career maturity, (vocational adjustment) as determined by the Career Development Inventory; self-esteem as determined by Coopersmith's Self-Esteem Inventory; and locus of control (independent/responsible behavior) as determined by the Nowicki-Strickland Locus of Control Scale for Children.

Definition of Terms

For the purposes of this study the following definitions were used:

Career education. Career education refers to the total efforts of public education and the community aimed at helping all individuals to become familiar with the values of a work oriented society, to integrate these values into their lives in such a way that work becomes possible, meaningful, and satisfying to each individual (Hoyt, et al., 1972:1).

Career development. Career development is a life long process which involves a series of experiences, decisions, and interactions, and which, taken cumulatively results in the formulation of a viable self-concept and the means through which the self-concept can be implemented both vocationally and avocationally (Coopersmith, 1967).

Career maturity. Operationally, career maturity is defined as scores on the Career Development Inventory.

Clusters Approach to Career Orientation. CACO is defined as a career program which combines career information with work experiences.

Vocational maturity. Vocational maturity is a term used to denote the degree of development; the place reached on the continuum of vocational development from exploration to decline. Vocational maturity may be thought of as vocational age, conceptually similar to mental age. The place reached on the vocational development continuum may be described not only in terms of gross units which constitute the life stages but also in terms of much smaller and more refined units (Super, 1955:153). It is also defined as the repertoire of coping behaviors leading to outcomes, compared with the behaviors of the peer group (Super, et al., 1974). The development of vocational maturity includes attitude change and the acquisition of information.

Self-concept. Self-concept is a construct which includes the values, attitudes, and beliefs one has concerning oneself. These self-perceptions influence and, to some extent determine, an individual's behavior and view of his environment.

Self-esteem. Self-esteem is an individual's feeling of personal worth, operationally defined as scores on the Self-Esteem Inventory.

Locus of control. Locus of control is a generalized expectancy functioning in a large number of situations. It is the force or forces which are believed by the person to be responsible for his

reinforcements. It is a question of whether the person has control over what happens to him (internally controlled) as opposed to being controlled by other factors such as fate, (externally controlled), (Rotter, 1966:609). Operationally, locus of control is defined as relevant scores on the Nowicki-Strickland Locus of Control Scale for Children.

Independent/responsible behavior. Independent/responsible behavior is the expression of oneself based on an internal source of confirmation and appraisal.

Limitations

The following limitations should be considered when drawing conclusions from this study:

1. The study was limited to a comparison of two seventh-grade classes in two separate schools in the Carroll County School System in Southwest Virginia. The setting was of importance because both schools were in a rural area.

2. The study was limited by the non-randomized selection of the experimental and the control groups. The students in the experimental group were chosen because they were participating in a class entitled the Clusters Approach to Career Orientation. The control group was comprized of an intact class of students who homogeneously matched the students in the experimental group. The criteria used for selecting the control group is described in Chapter 3.

3. Caution should also be given when generalizing the results of the Clusters Approach to Career Orientation class when applied to other time frames.

4. This study is limited by the potential reactivity of the pretests.

Organization of the Study

In Chapter 1 an introductory statement was presented. The need for the study and the objectives of the study were stated. Next, a definition of terms and the limitations of the study were given. The chapter was concluded with a description of the organization of the study. Chapter 2 includes a review of the related literature and research relative to career development, self-esteem, and locus of control. In Chapter 3 the design of the study is presented. The subjects are described, as are the instrumentation and data processing procedures. Chapter 5 fucuses upon a summary of the research project. The conclusions of the study are stated and appropriate recommendations are made.

Chapter 2

REVIEW OF RELATED LITERATURE

This chapter contains a review of the literature pertinent to this study. It begins with a historical account of the evolution of the concept of career education. The development of the Clusters Approach to Career Orientation is given. Next, the theories of career development and the relationship of self theory to career development are established. Following this is a description of several career maturity studies.

The next section of this chapter deals with the self-concept. Presented first are the theories and concepts of self. Next, is a section dealing with self-concept development, followed by an analysis of the relationship of self-concept to behavior and performance. The section is concluded with a discussion of how the self-concept changes and a description of the studies relating self-concept development and career education.

The remainder of the review of literature in this chapter deals with locus of control. Presented first is the development of locus of control, followed by the measurement of locus of control, and studies involving locus of control.

Does the Clusters Approach to Career Orientation result in a significant change in career maturity, self-esteem, or locus of control of seventh-grade students? This research endeavor was stimulated by

this question plus certain concepts from the fields of education, sociology, and psychology.

Career educators have indicated that the individual's career development process is influenced by factors relating to self such as self-acceptance, by personal factors such as values, and by situational factors. The relationship of self-esteem and locus of control to career development is explored in this chapter. One of the main focuses of this study is on the self-understanding process as it relates to a career orientation program. The first section of this chapter contains a review of the theories of career development and their relationship to self theory.

The Theories of Career Development and Their Relationship to Self Theory

Career development is a life long process which involves a series of experiences, decisions, and interactions which together result in the formulation of a worthwhile self-concept and provide for the implementation of that self-concept both vocationally and avocationally (Osipow, 1968). Vocational theories attempt to explain how the self-concept forms and how the experiences, decisions, etc. interact in a person's career development. All theories of career development and occupational choice were formulated to explain how individuals choose occupations and why they select and eventually enter different occupations (Crites, 1969).

Donald Super, who devised one of the most prominent theories of career development, defined vocational development as:

> . . . an ongoing, continuous, generally irreversible, orderly patterned, and dynamic process, which involves interaction between the individual's behavioral repertoire and the demands made by society, that is, by the developmental tasks. Vocational development is essentially a process of compromise or synthesis. (Super, 1957).

This definition emphasized the idea that vocational decisions are frequently influenced by early experiences and decisions, as well as by the general growth and personality development of the individual.

Super suggested three types of factors that play a major part in vocational behavior and adjustment: role factors, personal factors, and situational factors (Super, 1957). Role factors are the roles a person plays in light of his self-concept. Super (1957) said that the individual chooses a particular occupation in the belief that the role he will play in the job will be consistent with his picture of the kind of person he is. In this way his occupational roles and his self-concept will be compatible. According to Super, personal factors include intelligence, aptitudes, interests, personality traits and values. Situational factors include family background and economic situation in a given community, state or nation.

Super (1957) recognized the existence of five life stages and summarized his theory into ten propositions. According to Super's theory, the individual needs assistance in clarifying and testing his self-concept in all stages of development. Super and Bohn (1957) indicated that people tend to choose occupations that they construe as representing the characteristics they see in themselves.

Some revisions to the theory occurred when Super (1963) more explicitly outlined how vocational development occurs. The importance

of a self-concept was stressed and a vocational self-concept emerged as one of the many systems of a self-concept. In choosing an occupation, an individual's self-concept was expressed through the activities of the occupation he selected. The requirements of the occupation reflected the individual's interests, abilities, and other personal needs. Additionally, Super placed more emphasis upon vocational choice as a process. In doing so, he shifted from vocational choice to vocational development and introduced vocational maturity as a concept measuring the degree of development (Ryan, 1977).

Henry Borrow (1973) stated that for Super, adolescence is a critical period for revamping and building a more stable picture of oneself, a new self-image or self-concept. With passing time, the adolescent finds himself in social situations which make it possible and, indeed, necessary for him to translate his maturing self-concept into occupational terms.

Other researchers have found additional factors that should be considered relative to the career development process. Robert Hoppock (1967) developed a theory based on needs of the individual and the premise that occupations are chosen to meet perceived needs. Hoppock's theory stressed the need for assisting the individual in becoming aware of his interests, abilities, and needs. He emphasized the fact that accurate occupational information is necessary when making crucial occupational decisions.

Anne Roe recognized the relationship between vocational choices and the constant striving of the individual to fulfill his

needs. Her theory was based upon A. H. Maslow's hierarchy of needs. Roe also accented the importance of genetic factors as these interact with need hierarchies to determine vocational behavior and choice. According to Roe's theory, the parents create a particular psychological climate by the manner in which they satisfy or frustrate the early needs of the child. As a result, a basic direction in attention is developed whether toward persons or toward non-persons. This, in turn, results in predictable patterns of specific interests in the adult in terms of the fields to which he will apply himself.

Anthony and Louise Sores (1966) felt that personality traits possessed by an individual may have a bearing upon his choice of vocation and his adjustment to life. They said that " . . . it is probable that individuals are in related fields because they have similar personality characteristics, similar needs, and manifest a similar pattern of social adjustment." (Sores, 1966:29).

Ginzberg, (1952) in another theory of career development, analyzed the process of occupational decision making in terms of three periods: fantasy choices (before age eleven), tentative choices (between eleven and seventeen), and realistic choices (between seventeen and young adulthood). The basic elements of Ginzberg's theory consisted of the following three parts: (1) occupational choice is a process, (2) the process is largely irreversible, and (3) compromise is an essential aspect of every choice. He felt that the process begins with individuals at about the age of eleven, apparently the first time that a young person recognizes that he will eventually have

to do something about choosing his future work (Ginzberg, 1952:491). Ginzberg also felt that while all individuals have a range of options available when they make decisions, economic and social disadvantages construct the possibilities open to certain groups, particularly the minorities and the poor (Borrow, 1973).

In summary, it appears that the making of occupational choices is influenced by age, experience, family gackground, interests, needs, sex, race, values, and self-concept. The kinds of career oriented experiences to which the adolescent should be exposed appear to be those that offer an opportunity for self-appraisal as well as those that allow for exploration of career opportunities in our society. Vocational maturity can, consequently, be measured by comparing life stages or comparing actual behavior with the expected forms for that life stage and noting the agreement between them (Super, 1974). The Clusters Approach to Career Orientation is designed to provide experiences to facilitate students in meeting these various needs.

Career Maturity Studies

Several studies revealed significant changes in career maturity following a treatment. One such study by Anderson and Heimann (1967) was designed to assess the effects of short term (six weekly sessions, each averaging 35 minutes in length), individual, vocational counseling with 30 eighth-grade girls as compared to 30 eighth-grade girls in a control group on their vocational maturity, knowledge of occupational information, and ability to do self-estimates. Approximately eighteen weeks after the termination of

counseling, the Vocational Maturity Scale and Occupational Information Test were administered with the finding of a significant difference (.05 level) between the groups on the Vocational Maturity Scale criterion measure. Anderson and Heimann (1967) concluded that an implication of this finding was that eighth-grade girls were developmentally ready for preliminary career planning activities.

The Career Development Inventory was used for assessing an experimental program in Genessee County, Michigan, (Forrest and Thompson, 1974). Tenth-grade subjects exposed to the experimental program were found to have higher scores of Scale A (Planning and Orientation) and B (Resources for Exploration) than did the control group. This suggested that the program did increase the vocational maturity of tenth graders. In this study, the CDI proved to be an appropriate instrument to measure the outcomes of the experimental program. Healy (1974) also found that the CDI scales were related to consistency of certainty of career goals and supported its use as a measure of career development for students.

In North Carolina, the "Career Planning and Knowledge" section of the CDI was administered to middle school project and control groups. It was intended to measure their ability to make and justify tentative occupational choices. Results indicated that project students scored significantly higher than the control group (Schager, 1975). Another study also indicated that an experimental career education program significantly increased the career maturity of students in the seventh through the twelfth grades exposed to the

program, when compared to students not having this exposure (Greene, 1973).

Some studies showed no significant change in career maturity following a treatment. Roth (1972) designed a study to determine the effects of a career awareness program on the information and attitudes sixth-grade students have about careers. The target population was the 2,314 sixth-grade students in one school district in Reno, Nevada with the sample for the study being twelve, sixth-grade classes randomly selected from all the sixth-grade classes in the district. Sequential Approach to Vocational Education, developed by the Washoe County School District, and the University of Nevada in Reno, Nevada, was the treatment program used for this study with the treatment period being one semester in length. The Solomon four-group design was used with three classes, with approximately 80 students in each group. Data was collected by using a three-part test covering the quantity of information, the accuracy of information, and the attitudes students had about careers. One conclusion drawn from this study was that short exposure to career awareness experiences seemed to affect the information students had about careers, but not their attitudes.

Crow (1973) conducted a study of 300 eleventh and twelfth-grade students, randomly selected from an urban high school in the West, to determine if participation in a Vocational Exploration Group (VEG) would have a positive effect on control expectancy, self-esteem and vocational maturity. The criterion instrument, referred to as the Personal Reaction Questionnaire, was a combination of scales from the

Rotter Internal-External Control Scale. The data was analyzed using analysis of covariance with pretest scores used as the covariate. At the .05 level, no significant differences were found among the three groups, experimental, placebo treatment control group, and no-treatment control group, although some changes in the predicted direction were observed.

While some studies showed no significant change in career maturity following a treatment, findings reported by other researchers indicated that career maturity is positively and significantly influenced by career education programs. Each of these studies established its findings using a comparison of a treatment/no-treatment group. The findings demonstrated that career programs and experiences do effect vocational career maturity, and that the resulting career maturity can be measured by available instruments such as the Career Development Inventory.

Theories and Concepts of Self

Self-concept, by that label of by other labels such as self-awareness, self-image, self-perception or self-esteem, is one of the central themes in much of the literature available today about the individual, his personality, and his behavior. There are several definitions which are critical to understanding the theories of self.

Coopersmith (1976) defined the self as an abstraction that the individual develops about the attributes, capacities, objects and activities which he possesses. Combs, Avila, and Purky (1971) were brief and all-encompassing when they defined the term as relating to

all those aspects of the perceptual field to which is referred when the individual says "I" or "me."

In reviewing the literature, it was found that the terms self-esteem and self-acceptance were often used interchangeably. Morris Rosenberg indicated that self-esteem is a positive or negative attitude toward the self. Self-acceptance implies that the individual knows what he is, is aware of his virtues and deficiences, and accepts what he sees without regret (Rosenberg, 1965).

Hurlock (1974) perhaps used the best approach for describing self-concept by breaking it down into different components. Hurlock revealed that the individual has the following four kinds of self-concepts: the real self; the transitory self; the social self-concept; and the ideal self-concept, including what a person aspires to be and what be believes he ought to be (Hurlock, 1975).

Ruth Strang (1957) stated that the "individual's values and philosophy" are a part of his ideal self-concept. Rutan (1971) pointed out that "self-acceptance" can be measured by looking at the discrepancy between a person's ideal self-concept and his actual self-concept. Hurlock indicated that self-understanding and self-acceptance go hand-in-hand.

Factors or conditions having the greatest effect on lack of self-acceptance include: lack of self-understanding; unrealistic expectations; environmental obstacles such as discrimination based on race, sex or religion; and severe emotional stress. Favorable social attitudes, identification with well adjusted people, a perponderance

of successes, and self-perspective (ability to see himself as others see him) can have a positive effect on the person's self-acceptance (Hurlock, 1975). Good childhood training in a democratic setting in which rules and regulations are carefully explained to the child also fosters self-acceptance.

Many personality theorists have incorporated self-concept into their theories of personality development. The most fully developed of these theories, proposed by Carl Rogers, is known as non-directive or client-centered therapy. According to Rogers, there are two aspects of the self or self-concept. The first of these is the self-as-it-is, which refers to the perceived self or the way that the person perceives himself to be. The second aspect of the self is the ideal self, or the self that the person would like to be. If the self-as-it-is and the ideal self are congruent, then the person is in harmony and in a state of becoming self-actualized. If not, the person becomes anxious, defensive, and rigid in his thinking.

A number of psychologists, sociologists, and philosophers have dealt with the self in one form or another. Sullivan dealt with the origins of a positive or negative self-concept as did Horney and Adler. Sullivan focused on the importance of early family relations in particular, and the interpersonal nature of self-esteem in general. Horney discussed the consequences of basic anxiety in terms of self-concept and the defenses that consequently develop to deal with this anxiety. Adler mentioned low self-esteem as an inevitable childhood occurance which, with acceptance and support, can have a positive

motivating effect. Erickson dealt with personality integration and self-identity, especially in terms of the adolescent. Sherif stated that the self is a subsystem of the total psychological system, which is basically the same view as that of the gestalt psychologists Koffka, Kohler, and Lewin (Young, 1972).

The preceding indicated the deversity and lack of consistency in the definitions and terminology applied to self. In summary, however, self-concept seems to be generally accepted as the image one holds of himself with regard to his attitudes, values, and behavior--the kind of person he is and how he feels about himself as that kind of person.

Self-Concept Development

The self-concept is learned the way other perceptions are learned--through the experiences of life. Studies by Combs, Avila, and Purkey (1971); Padgett (1974); and the Florida Educational Research and Development Council (1971) have all supported the generally accepted theory that establishment of the individual's self-concept is a developmental process.

It seems to be generally accepted that self-concept begins to develop shortly after birth and continues in the formative stage into the adolescent years. By the time the individual has reached adolescence, the self-concept is stable enough to influence future decisions about self with regard to such roles as occupations. Although the self-concept has become generally established by the late adolescent stage, numerous researchers have indicated that it can be changed or

modified, either positively or negatively. Therefore, a program such as CACO can conceivably effect self-concept change.

The relationship of self-concept to behavior and performance. A review of the literature pertaining to self-concept revealed that many writers, such as Combs, Avila, and Purkey (1971) were adamant in their belief that no other single factor affects individual behavior as much as does self-concept. They theorized that, once established, the self-concept provides a screen through which everything else is seen, heard, evaluated and understood and that these perceptions, in turn, determine the resulting behavior (Smith, 1975).

Anastasi (1968) discussed the "self-fulfilling prophecy" and its relationship to self-concept and performance. Shaffer and Shoben (1965) also presented a theory which was reinforced by Fitts (1972) and Padgett (1974), stating that the individual will consciously behave in such a way as to promote and extend his perception of self. Johnson and Vestermark (1970) stated that the consistency between self-concept and behavior continues throughout life and has great effect on the individual's professional or occupational role.

An extension of self-concept as a behavior determinant is apparant in numerous theories of vocational choice. Osipow (1968) reported that a major contemporary theorist, Donald Super, developed his supposition based in part on the belief that man chooses or fails to choose a career, depending on whether or not the career is consistent with his self-concept.

Based on the available data, there seems to be little doubt

that changes in self-concept can be affected. In order to test this hypothesis, Maeher, Mensing, and Nafzyer (1962), assigned unduly low grades to students who took classroom examinations. These experiments revealed that future performance could be predicted, implying that students' self-images changed to comply with their perceived behavior. Harvey, Kelly, and Shapiro (1957), and Levenway (1955), had previously conducted experiments similar to the Maeher, Mensing, and Nafzyer study, and had arrived at the same conclusions.

Although numerous researchers have indicated that the self-concept becomes stabilized by late adolescence, Combs and Snygg (1959) theorized that self-concept is constantly changing throughout life. They contended that this constant change is not inconsistent with stabilization, but is a natural process. It was their belief that, as the world changes, man's needs dictate that he himself change.

Gergen (1971) in his studies which were tested and reinforced through controlled experiments, found that the individual's self-concept, or the overt behavior symbolizing the self-concept, constantly changes as a result of "reflections" from others. Changes in self-concept are perhaps most notable in therapeutic settings (Hamachek, 1971). Rogers and Dymond (1954) and Frank (1961) effectively described the genuine, accepting, and understanding atmosphere generated by some therapists, which can have a positive impact on the client's self-concept.

Studies Relating Self-Concept Development to Career Development

The findings of researchers who have experimented with self-concept change in an academic setting have implications for educators. Authors who have noted that self-concept development is a major part of the career development process are Super (1967), O'Hara and Tiedman (1959), Miller (1961), Hill (1965), Field (1967), Matheny (1969), Pietrofesa (1969), Isaacson (1971), Bottoms, et al. (1972), and Pietrofesa, Matheny, Leonard, and Van Hoose (1972). Other authors who stated specifically that the study of self was being neglected in career education are Martin (1971), Severinsen (1973), Agne and Nash (1973), Healy (1974), and Smith (1975).

Several career development models emphasize self-concept development. Developmental self-concept theory, as a model for enhancing the development of the self-concept and giving careful attention to current developmental needs, has just begun to influence guidance practice. Super, (1967), has been credited with the developmental approach to vocational behavior. Severinsen (1973) thought that the developmental and self-concept components are the most unique feature of Super's theory. Severinsen (1973) stated that Super's developmental self-concept viewpoint stresses the development, through exploratory behavior, of an accurate self-concept which can be implemented through work. Super (1957) hypothesized that vocational choice is the implementation of one's perception of self in a real life situation. He indicated that the translation of the self-concept into a vocational choice takes place primarily during adolescence.

Hansen (1972) developed a self-concept oriented model which builds on career development principles and vocational development tasks and uses a variety of methods and media. The model assumes that career development is self-development and provides for exploration of self in relation to educational and vocational pursuits and in consideration of the place that work and leisure have in a person's life.

In an article, Healy (1974) stated the need for career educators to foster such general attitudes as a sense of agency, belief that one can direct one's own career and become the kind of person he or she wishes to be, and a feeling of self-esteem or such basic skills as time management and interpersonal cooperation. Healy (1974) felt that counselors can contribute directly to career education by teaching such attitudes and skills.

Studies giving support to the theory that an individual's vocational choice is an effort to implement a concept of self are Englander (1960), Blocher and Schutz (1961), Morrison (1962), Oppenheimer (1966), and Korman (1969). Studies using a career education related treatment and producing a significant change in self-concept of subjects were Catron's (1966), Williams and Hill's (1961-65), and Sillin's (1973).

Sillin (1973) conducted a study using an experimental group (94 sixth-grade students) and a control group (90 sixth-grade students) with the groups having been selected randomly from the sixth-grade classes in Topeka Public Schools. The counseling staff made plans and developed specific activities that would be conducted with

the experimental group during a four-month period. During this time period, the control group was not involved in any of the sessions. Pre and post testing was conducted with the Piers-Harris Self-Concept Scale. Results indicated that a significant gain (.05 level) had been made by the experimental group.

Pietrofesa (1968) conducted a study on the effectiveness of the teacher and the school in helping children to gain a more positive and realistic view of one's self and one's own self-image, which he presents as a vital factor in career developmental choice. He conducted a workshop for 65 elementary school teachers, designed to aid them in their understanding of self-concept. He concluded that teachers can be instructed to effectively improve their students' self-concept. He felt that the students' self-concept is a vital factor in career development and eventual career choice.

There have been few studies dealing specifically with career education programs in relation to self-esteem or locus of control. One study, however, conducted by Johnson (1966) consisted of 269 boys and 388 girls enrolled in thirty cooperating schools in a pilot program in vocational education. The purpose was to identify psychosocial characteristics of secondary school trainees who were rated by their teachers as having poor employment potential. Characteristics were analyzed in terms of ratings of on-the-job performance and of the probable acceptability of the student as an employee. The results of Johnson's study report that boys rated as potentially poor performers were relatively low in intelligence, grades, aspirations, achievement

value, and self-esteem. Girls similarly rated tended to be relatively low in the same areas.

A recent study of the relationship between self-esteem, self-perceived abilities, and vocational choice was conducted by Mansfield (1973). The theory that self-esteem acts as a moderating variable in the occupational choice process was supported when he examined the relationships between self-esteem, self-perceived abilities and abilities perceived as required for entry level into an occupation. Those with high self-esteem see themselves as possessing the abilities they perceived as necessary in their chosen occupations.

Summary of self-concept. The following conclusions are a result of the review of literature and research related to self-concept.

1. There are many different definitions of self-concept, self-perception, self-esteem or self-theory, but most of these definitions agree that the term "self-concept" relates to the image one holds of himself, with regard to attitudes, values, behavior, and evaluation of self.

2. The development of self-concept begins early in life and matures during adolescence, although it is subject to change throughout life. The knowledge that self-concept can be changed is especially relevant to educators. Educational programs which will achieve desired objectives and concentrate on establishment of healthy self-concepts can be devised.

3. Behavior is consistent with self-concept. All behavior is designed to perpetuate the self-concept. Vocational choice, for example, is believed to be a result of the individual's selection of a career that is in keeping with his perception of himself.

4. Academic performance is also a concomitant of self-concept. Generally, students who are led to believe that their performance is poor will continue to perform in this way.

This part of the review of the literature has included reports of numerous research studies. Many of the resources are the reflections of authors who have conducted extensive research studies in the area of self-concept. A logical conclusion related to these ideas tends to support the predictions that self-concept changes occur as a result of conditions in which the individual functions, and that self-concept is a chief determinant of behavior, performance, and career choice.

Locus of Control

The development of LOC. Locus of Control (LOC) refers to the extent to which a person feels that he can control what happens to him (Powell, 1971). This dimension is conceptualized as a continuum according to the degree to which people accept personal responsibility to forces outside their control. The external forces might be those of chance, fate, an inability to understand the world, or the influence of other, powerful people. In social learning theory Rotter (1954) stated that this construct is considered to describe a generalized

expectancy, operating across a large number of situations, which relates to whether or not the individual possesses or lacks power (or personal determination) over what happens to him (Battle and Rotter, 1963).

In the early stages of development of locus of control, there is no conception of the relationship between the outcomes of events and one's own behavior. Consequently, young children tend to view their experiences as being externally controlled and due to the whims or manipulations of fate, other people, and/or external forces. As development proceeds, the child begins to note that he is often able to influence the outcome of events by his own actions. He is thus more likely to view his goal-oriented experiences as being internally controlled, and as consequences of his own behavior. Up to a point in the maturation process of younger children, there is a motivational system under which their behavior is directed in response to cues which are essentially hedonistic. With the development of conceptual maturity and internal control, a second motivational system arises in which the child directs his behavior in response to cues associated with personal success or failure.

Several theorists have done extensive research emphasizing the importance of locus of control and the process of development in this area as man strives to become more effective in controlling his personal world. In Rotter's social learning theory (Rotter, 1954), it is stated that the potential for any behavior to occur in a given situation is a function of the person's expectancy that the given

behavior will secure the available reinforcement desired by that person. In a particular situation, the individual, though desirous of an available goal, may believe that there is no behavior in his repertoire that will allow him to be effective in securing the goal.

Rotter holds that a subject's behavior directed toward attaining a learned goal can be predicted by knowing the subject's situation and his past experience. According to Rotter, the four classes of variables involved in prediction are: the subject's behavior; his expectations that the behavior will be followed by particular kinds of reinforcement; the value of the reinforcement; and the psychological situation in which the behavior takes place.

Rotter (1966) summarized what he meant by internal and external locus of control when he wrote:

> When a reinforcement is perceived by the subject as following some action of his own but not being entirely contingent upon his actions, then in our culture, it is typically perceived as the result of luck, chance, fate, as under the control of powerful others, or as unpredictable because of the great complexity of the forces surrounding him. When the event is interpreted in this way by an individual, we have labeled this belief in external control. In layman's language, these persons may be described as lacking self-confidence or suffering from inferiority feelings (Lefcourt, 1966). If the person perceives that the event is contingent upon his own behavior, or his own relatively permanent characteristics, we have termed this as belief in internal control. (Rotter, 1966:609).

Locus of control has been reported as correlated with such demographic variables as sex, social class, ordinal position in the family, race and attitudinal variables such as confidence, defensiveness, powerlessness, aspiration level, and conformity (Massari and

Rosenblum, 1972:355). Concepts such as competence, helplessness, hopelessness, mastery, and alienation have all been utilized in one way or another to describe the degree to which an individual is able to control the important events occuring in his life space (Lefcourt, 1966).

Measurement of locus of control. The first attempt to measure the internal-external control dimension as a personality variable in social learning theory was designed by Phares (1957). L. Liverant, J. B. Rotter and M. Seeman produced a revised version of this scale and later another scale, with modifications, was set up by Liverant, Rotter and D. Crowne.

This final version of the scale is commonly referred to as the I-E Scale of Locus of Control (Rotter, 1966). The Locus of Control Scale for Children is an orally administered true-false scale (Bialer, 1961); the Childrens' Picture Test of Internal-External Control presents a series of cartoons about which a child states "what he would say" in the depicted lifelike situations which involve attribution of responsibility (Battle and Rotter, 1963); the Intellectual Achievement Responsibility Questionnaire contains forced-choice items for children, pairing an internal and external interpretation of achievement outcomes. This scale provides for possible differences between responsibility attribution for failure and success outcomes (Crandall, Katkovsky, and Crandall, 1964). The Powerlessness and Normlessness Scales contain Likert-type scales derived from sociological studies of alienation (Dean, 1961).

The sense of powerlessness discussed by Seeman (1959) as one meaning of "alienation," is thought to relate to the individual's social circumstances as well as affecting his social learning. An individual who is "alienated" would hold the expectation that his own behavior cannot determine the outcomes he desires. There has been some empirical evidence to support this interpretation.

In the reported ethnic studies, such as (Battle and Rotter, 1963); (Lefcourt and Ladwig, 1966); (Graves and Jessor, 1961); (Gore and Rotter, 1963); and (Strodbeck, 1958), groups whose social position is one of minimal power either by class or race, tended to score higher in the external-control direction. Within the racial groupings class interacted so that the double handicap of lower-class and lower-caste seemed to produce persons with the highest expectancy of external control. Perhaps the apathy and what is often described as lower-class lack of motivation to achieve, may be explained as a result of the disbelief that effort pays off.

Recent research has been conducted on Rotter's internal-external locus of control and current issues. MacDonald (1971) pointed out the relevance of the locus of control construct to such issues as tobacco smoking and the ability to stop smoking (James, Woodruff, and Werner, 1965); personality problems and the willingness to confront those problems (Phares, Ritchie, and David, 1968), and to other social class and ethnic groups. From his review of the literature, MacDonald (1971) concluded that socially disadvantaged persons who do not try to improve their circumstances, behave in such a manner mainly because of their low expectancy for success.

Within the last four years there have been a number of experiments dealing with internal-external locus of control and academic success. The hypothesis that academic success and locus of control are positively related was not supported in studies by Hjelle (1970) and Massari and Rosenblum (1972). Studies by Lao (1970), Nowicki and Roundtree (1971), and Brown and Strickland (1972), however, yielded positive results in testing the relationship between I-E locus of control and academic success. Lao's study confirmed the hypothesis that students with high personal control would score high on performance, academic confidence and educational expectations.

In summary, research confirms the supposition that personal beliefs are important determiners of the reinforcing effects of many experiences in a person's life. If the individual is convinced that he has little control over his destiny, then he has little reason to modify his behavior in an attempt to alter the probability that certain events will occur. Rewards and punishments, consequently, will loose much of their reinforcing value, since they will not be effective in strengthening or weakening responses. Belief in external responsibility is positively correlated with defensive and maladaptive levels of aspiration behaviors (Phares, 1957). If an individual feels that he has the power to take charge of his own life, and if he acts on this belief, it is thought that this behavior should be apparent to others, and should have a positive correlation with the development of career maturity. The development of locus of control also has a direct relationship to the enhancement of self-esteem.

Persons who have low self-esteem are not likely to exhibit independent/ responsible behavior. It also appears that locus of control is a variable that is associated with the individual's career decision making process and, consequently, was examined in this study.

Chapter 3

RESEARCH METHODOLOGY

The purpose of this study was to compare career maturity, self-esteem and locus of control between students who have been enrolled in the Clusters Approach to Career Orientation and students who have not taken this class. Chapter 3 contains a description of the design of the study, the instrumentation, and the sampling procedure. The method of data collection and the statistical analysis are also described.

Design of the Study

This study utilized two groups of seventh-grade students in an educational setting. The groups were designated as the experimental group and the control group. Both groups were administered on the same day, the same set of pretests--the Career Development Inventory, Coopersmith's Self-Esteem Inventory, and the Nowicki-Strickland Locus of Control Scale for Children.

The experimental group was enrolled for a semester in a Clusters Approach to Career Orientation class. The control group was not enrolled in this class. At the end of 90 days (a semester) both groups were administered posttests. The same form of each of the three tests was administered as the pre and post measures.

The design for this study was:

Experimental	0	X	0
Control	0		0

0 = occurance of testing, all three tests

X = treatments

Instrumentation

The three instruments which were selected for use in this study were the Career Development Inventory (CDI), Coopersmith's Self-Esteem Inventory, and the Nowicki-Strickland Locus of Control Scale for Children. These instruments were selected on the basis of their appropriateness and relevance to the stated objectives of this study. A pre and posttest of each of these three instruments was given to the experimental and control groups. A description of these instruments follows.

Career Development Inventory (CDI)

The Career Development Inventory, selected for this study, was a recommended vocational maturity measure (Hilton, 1974 and United States Office of Education, 1974). This instrument was specifically identified as measuring vocational maturity related to career concepts at the secondary level. The CDI was also initially chosen by the Directors of the CACO project as an instrument to be used for an evaluation of the program. The CDI consists of three scales: (1) Scale A, Planning and Orientation, has 33 items measuring concern with

choice, specificity of planning, and self-estimated amount of occupational information; (2) Scale B, Resources for Exploration, has 28 items measuring a self-rated assessment of the used and available resources for use with the planned activities, an attitudinal measure (affective); and (3) Scale C, Information and Decision-Making, is a cognitive measure of 30 items assessing the student's actual knowledge of occupational information and decision-making ability. The Total Career Development Scale provides another vocational measure which can be used for comparison of students and groups.

Reliability based upon the test-retest method yielded coefficients all above .70, a minimum level desired in an instrument to be used for group assessment or program evaluation (Super and Forrest, 1972). The test is a self-explanatory instrument for grades 6-12. The time for administration is 30-45 minutes and all questions must be answered to be scored.

The CDI is designed to elicit information from the subject which will indicate his vocational adjustment, thus the instrument is potentially of value in indicating inadequate adjustment based on misinformation which can be systematically changed. Change can be produced by exposing the individual to appropriate experiences which may allow an alteration of his self-concept.

The CDI has not yet been published and is still being researched, consequently reliability and validity data are inadequate at the present time. The information that is available, however, suggest that this will be a useful measure for evaluating the career

development and career aspirations of students. Caution must be taken, however, in interpreting and generalizing the results, considering the present stage of development of the CDI.

Despite these limitations, the CDI was selected because the areas it purports to assess are relevant to this proposed study. The questions found on the CDI are appropriate for both boys and girls. The reading difficulty of the CDI makes its use appropriate at and above the sixth-grade, and its vocabulary and content make it acceptable to junior and senior high school students in any grade.

Self-Esteem Inventory

In this study, self-esteem was measured by the Self-Esteem Inventory which was developed by Stanley Coopersmith (1967). Accuracy in the measurement of self-esteem has been difficult because many types of measuring instruments have been used purporting to measure self-esteem as inferred from the measurement of self-concept. The numerous instruments used to measure self-concept not only vary in the manner in which they measure self-concept, but also in the aspects purportedly measured. These varied approaches in the measurement of self-concept have caused difficulty in unifying understanding of the construct. Many (1972) reported that it is exceedingly difficult to equate many of the research studies due to the differences in approach and theoretical background, and particularly to the differences in measurement.

Wylie (1961), after an extensive review of studies dealing with self-concept, suggested that constructs such as characteristics

of self-actualization, self-differentiation and self-consistency had not led to meaningful research and that constructs such as self-acceptance or self-esteem had proven to be much more encouraging. While self-esteem is not inclusive of all aspects included in self-concept, it is a more definitive term and therefore lends itself more readily to research. Researchers studying the basis of self-esteem tend to work within past views of self-concept and encompass self-theory. Coopersmith's (1959:310) summary of the development of the self helps to clarify the thinking of past theorists.

> During the early years the child develops a concept that the parts of his body, the responses of others to him, and the objects he receives have a common point of reference. With more experience he arrives at an abstraction of what these attributes and events have in common and what they subsume. The abstraction is the 'object' to which he refers when he considers his reactions of others to him. It is an abstraction that is formed and elaborated in social intercourse, private reactions to himself, mastery in solving developmental tasks, and competence in dealing with life situations.

Coopersmith (1959) traces the development of the "abstract" self similar to Mead, James, and other theorists in viewing the self as multidimensional. Thus, he devised an instrument specifically to measure an individual's self-esteem, which he considered to be the evaluative aspect of self-concept (Coopersmith, 1959).

Much of his fifty-item Self-Esteem Inventory, a measure of self-esteem from the perspective of the subject, is based on items selected from the Rogers and Dymond scale (Coopersmith, 1959). Five psychologists classified the original pool of items as indicative of high or low esteem. The items of the instrument are short statements directed toward the subject's self-attitudes in four areas: peers,

parents, school, and personal interests. The inventory yields one total self-esteem score. The instrument has been validated by Coopersmith and published in a book which also included a listing of other findings relative to self-esteem. The original sample contained between 80 and 140 fifth and sixth-graders. The scale has subsequently been used with many ages. In the original work (Coopersmith, 1967), a behavioral rating scale for teachers was also used in conjunction with the self-ratings.

Taylor and Reitz (1958) found a .90 split-half reliability for the long form of this inventory. Coopersmith concluded that the self-esteem of an individual remains constant for at least several years. Reliability of .70 was obtained for the Self-Esteem Inventory on a test-retest sample of 56 intermediate age children after a three-year interval. Coopersmith (1959) suggested that at some time preceding middle childhood the individual arrives at a general appraisal of his worth, which remains relatively stable and enduring over a period of several years.

A recent factor analytical study of the Self-Esteem Inventory by Kokenes (1974) further supported the reliability and validity of this scale. In a review of Coopersmith's instrument, Sears (1969) indicated that the instrument had reasonable validity and good reliability. He comments that "Coopersmith has gone a long way beyond his predecessors in the construction of a useful model for self-esteem."

Nowicki-Strickland Locus of Control Scale for Children

The Locus of Control Scale for Children, used in this study, taps locus of control as defined by Rotter (1966). The Nowicki-Strickland instrument was designed as a measure of generalized expectancies for internal versus external control of reinforcement mode. The test was developed from an item pool of 102 items. Item analysis reduced the test to the present 40 items.

The authors have devised two short forms, one for grades 3-6, and another for grades 7-12. These short forms are derived from a subset of items in the complete scale. An adult form of the Nowicki-Strickland Scale has also been developed (Nowicki-Duke, 1972), as well as a pre-school version. A variety of samples, ranging from third grade through college, has been used with this instrument. The main sample consisted of 1017 children ranging from the third through twelfth-grade in four different communities.

Estimates of internal consistency via the split-half method corrected by the Spearman-Brown Prophesy Formula are: $r = .63$ (grades 3-5); $r = .68$ (grades 6-8); $r = .74$ (grades 9-11); and $r = .81$ (grade 12). Approximate sample size for the first three groups are 300, and 87 for the grade 12 group. Test-retest reliabilities sampled at three grade levels, six weeks apart, are .63 for the third-grade, .66 for the seventh-grade, and .71 for the tenth-grade.

The Nowicki-Strickland Locus of Control Scale for Children was developed carefully by researchers of solid reputation. Though of recent construction, it has been used in many studies. Results

presently available indicate the scale to have adequate internal consistency and temporal consistency. Data relevant to divergent and covergent validity are encouraging. In short, it appears to be the best measure of locus of control as generalized expectancy presently available for children (Robinson and Shaver, 1973).

Sampling Procedure

Carroll County was the school district in which the study was conducted. Carroll County, a basically agricultural county located in Southwest Virginia, was chosen as the target area for this study because the Clusters Approach to Career Orientation was being offered on a semester basis to seventh-grade students at Woodlawn Intermediate School.

When the target population was selected all seventh-grade students, the accessible population, were identified and an intact class from Hillsville Intermediate School was chosen as the control group. This group was chosen because it was determined to be the most homogeneous when compared to the experimental group on such variables as ability and socioeconomic background.

The sample size consisted of two intact classes of seventh-grade students, designated as the experimental and the control groups, with approximately thirty students in each class. The experimental group was an intact class enrolled in the Clusters Approach to Career Orientation. The control group was an intact math class which had no students which had ever participated in a career orientation class.

Data Collection

The pretest data was collected during February of 1977, at the beginning of the schools' second semester. Posttest data was collected in the latter part of May, 1977. Prior to the collection of data, a schedule with each school was established and the classes identified.

The researcher administered the three instruments: the Career Development Inventory; Coopersmith's Self-Esteem Inventory; and the Nowicki-Strickland Locus of Control Scale for Children, to insure consistency in administration.

Statistical Analysis

In this study Multivariate Analysis of Covariance (MANCOVA) was used. This procedure was employed because the researcher wanted to test for a difference between students enrolled in CACO and students not enrolled in CACO on the career related variables of vocational adjustment, self-esteem, and independent/responsible behavior, respectively. The pretest scores on the Career Development Inventory, Coopersmith's Self-Esteem Inventory, and the Nowicki-Strickland Locus of Control Scale for Children were used as the covariates to determine if there was a significant difference ($p < .05$) between the experimental and control group of students. The dependent measures were the posttest scores of career maturity, self-esteem and locus of control. The independent variable was class memberships.

Summary

This chapter described the procedures and methods that were used in this investigation. The first section of the chapter explained the design and the nature of the research. A discussion of the three instruments followed, with a description being given of the population and sampling procedures used in the study. Next, the procedures employed for the data collection were given, and the hypothesis was stated. The final section of the chapter described the statistical methods used to analyze the data.

The results of the study, based on statistical treatment of the data, will appear in Chapter 4, with a discussion of the findings. Chapter 5 will cover the conclusions and recommendations.

Chapter 4

PRESENTATION OF DATA AND ANALYSIS OF RESULTS

Introduction

The purpose of this study was to compare seventh-grade students enrolled in a Clusters Approach to Career Orientation class and students not enrolled in this class in order to determine if the Clusters Approach to Career Orientation had any significant effect on the students' career maturity, self-esteem enhancement, and locus of control (independent/responsible behavior).

The analysis of the data is described in this chapter. The statistical procedure, multivariate analysis of covariance, was used to test the "experimental" hypothesis that the students receiving the Clusters Approach to Career Orientation class manifested higher career aspirations, greater self-esteem enhancement, and more independent/responsible behavior than did the control group. This technique permitted adjustment of the posttest mean scores on the three criteria, reducing the possibility that any initial differences on pretest scores would falsly influence any ultimate differences that might be found.

In order to determine if there were significant differences in the changes among students on the three variables of concern, both groups of students were administered three instruments on a pretest, posttest basis. These three instruments, the Career Development Inventory, Coopersmith's Self-Esteem Inventory, and the Nowicki-

Strickland Locus of Control Scale for Children were administered the first week of the second semester and again at the end of the semester. In this study the pretest scores of the variables of career maturity, self-esteem enhancement, and independent/responsible behavior were used as the covariates.

The results of the multivariate analysis of covariance (MANCOVA) revealed no significant differences ($p < .05$) between the experimental and control groups of students on the variables of vocational maturity, self-esteem enhancement, and independent/responsible behavior. The F statistic of 0.522 is less than 0.669, which was required to reject the hypothesis at the ($p < .05$) level of significance. Table 1 depicts this analysis. In this study, the dependent measures were the posttests of career maturity, self-esteem and locus of control. The covariates were the pretests of career maturity, self-esteem and locus of control, and the independent variable was class membership.

The mean scores, standard deviations, and adjusted mean scores for the experimental and control group on the criterion measure of vocational maturity were presented in Table 2. The multivariate analysis of covariance revealed that on the pretest and posttest of the Career Development Inventory the mean of the scores for the control group was larger than the mean of the scores for the experimental group. The variance of the experimental group changed less from the pretest to the posttest than did the variance of the control group.

Table 1

MULTIVARIATE ANALYSIS OF COVARIANCE OF STUDENTS
Using Wilks Lambda Criterion

Source	df (hypothesis)	df (error)	F	p less than
Covariates	9	97.5	1.132	0.345
Between Class	3	43	0.522	0.669
Within Class	9	104.8	3.065	0.001

*Rao's Approximation

Table 2

MEAN SCORES, STANDARD DEVIATIONS AND ADJUSTED MEAN SCORES ON THE CAREER DEVELOPMENT INVENTORY

Group	N	Mean Score	Standard Deviation	Adjusted Mean Score
Control Pre	28	407.1	56.38	
Control Post	28	439.2	69.01	437.2
Experimental Pre	22	401.0	48.16	
Experimental Post	22	425.2	47.53	427.7

The mean scores, standard deviations, and adjusted mean scores for the experimental and control group on the criterion measure of self-esteem were presented in Table 3. The multivariate analysis of covariance revealed that on the pretest as well as the posttest of Coopersmith's Self-Esteem Inventory the mean scores for the control group were larger than the mean scores for the experimental group. On this inventory the variance of the control group changed less from the pretest to the posttest than did the variance of the experimental group.

The mean scores, standard deviations, and adjusted mean scores for the experimental and control group on the criterion measure of locus of control were presented in Table 4. As a result of the multivariate analysis of covariance it was found on the pre and posttest of the Nowicki-Strickland Locus of Control Scale for Children that the mean scores for the control group were larger than the mean scores for the experimental group. On this instrument as well as on the self-esteem inventory the variance of the control group changed less from the pretest to the posttest than did the variance of the experimental group.

The overall multivariate analysis of covariance (MANCOVA) failed to reveal any significant differences ($p < .05$). Regardless of the lack of significant differences between the control and experimental groups the data were analyzed descriptively. The following are the results of the descriptive analysis.

Table 3

MEAN SCORES, STANDARD DEVIATIONS, AND ADJUSTED MEAN SCORES ON COOPERSMITH'S SELF-ESTEEM INVENTORY

Group	N	Mean Score	Standard Deviation	Adjusted Mean Score
Control Pre	28	17.5	3.11	
Control Post	28	18.2	3.12	16.2
Experimental Pre	22	16.2	5.25	
Experimental Post	22	17.0	4.98	19.6

Table 4

MEAN SCORES, STANDARD DEVIATIONS, AND ADJUSTED MEAN SCORES OF THE NOWICKI-STRICKLAND LOCUS OF CONTROL SCALE FOR CHILDREN

Group	N	Mean Score	Standard Deviation	Adjusted Mean Score
Control Pre	28	6.1	3.41	
Control Post	28	7.0	3.33	5.0
Experimental Pre	22	5.7	3.70	
Experimental Post	22	6.6	4.23	9.2

The plots of the scores obtained from the Career Development Inventory for the control and experimental groups are found in Table 5. More members of the experimental group appeared to make a significant change from the pretest to the posttest than did members of the control group. This ratio was 72.7% to 60.7%. Differences in variances of the three variables may explain the lack of significance.

On Coopersmith's Self-Esteem Inventory, 45.4% of the experimental group improved on their scores from the pretest to the posttest, while 60.7% of the control group scores improved. The plots of the scores obtained from Coopersmith's Self-Esteem Inventory for the control and experimental groups are found in Table 6.

On the Nowicki-Strickland Locus of Control Scale for Children, 31.8% of the experimental group improved their scores from the pretest to the posttest as compared to a 39.3% improvement on the control group scores. (On the locus of control instrument a lower score on the posttest than on the pretest indicated improvement.) Again, differences in variances for the three variables may explain the lack of significance. The plots of the scores obtained from the Nowicki-Strickland Locus of Control Scale for Children for the control and experimental groups are found in Table 7.

There was no consistent pattern of change exhibited by group or by sex from the pre to the posttest on the three instruments used in this study. Few students were consistent in the direction of change from the pre to the posttest on all three instruments. There were a few instances, however, when a student made the same direction

Table 5

SCATTERGRAM OF CAREER DEVELOPMENT INVENTORY
Pre and Post Test Scores

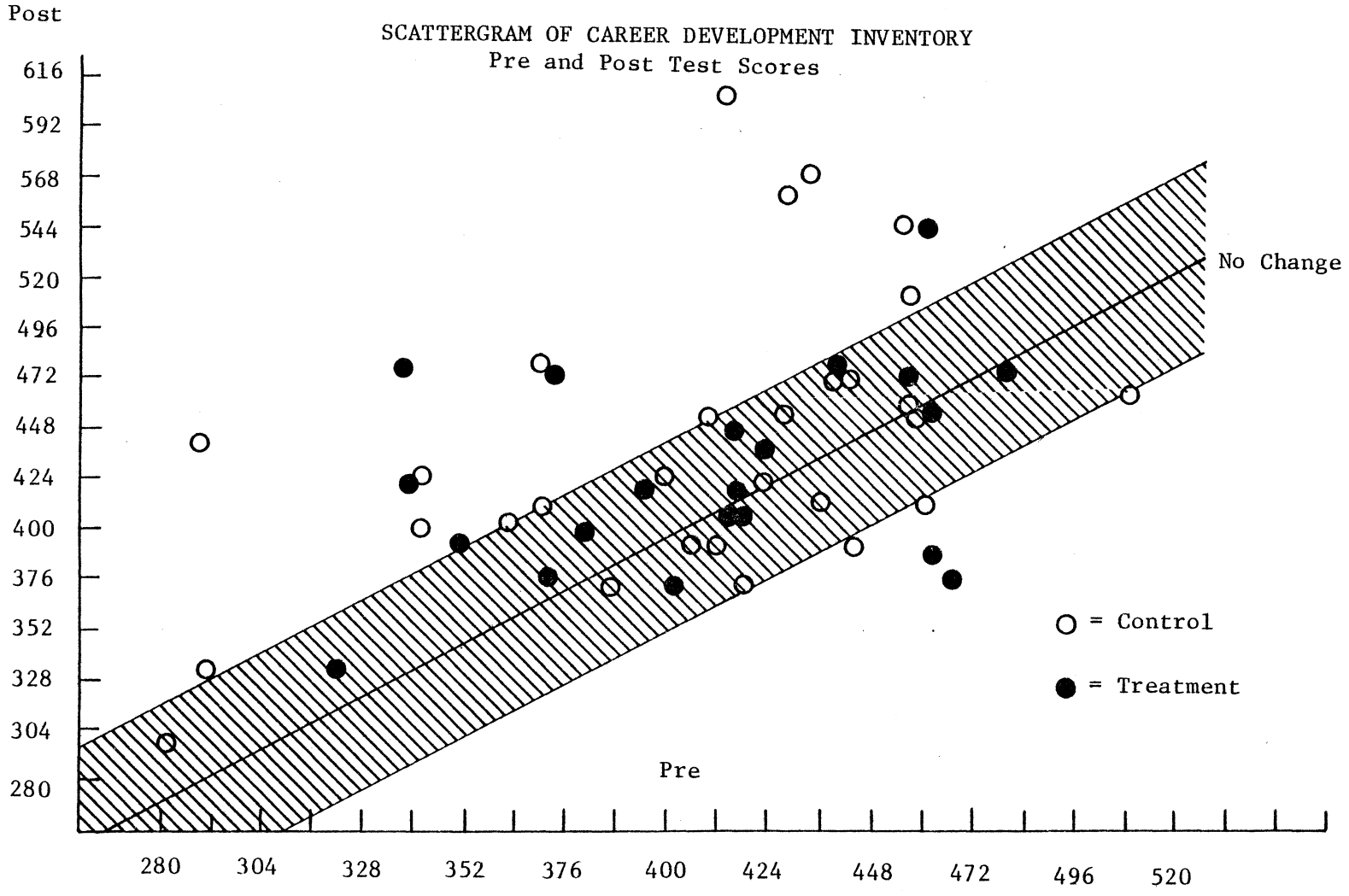
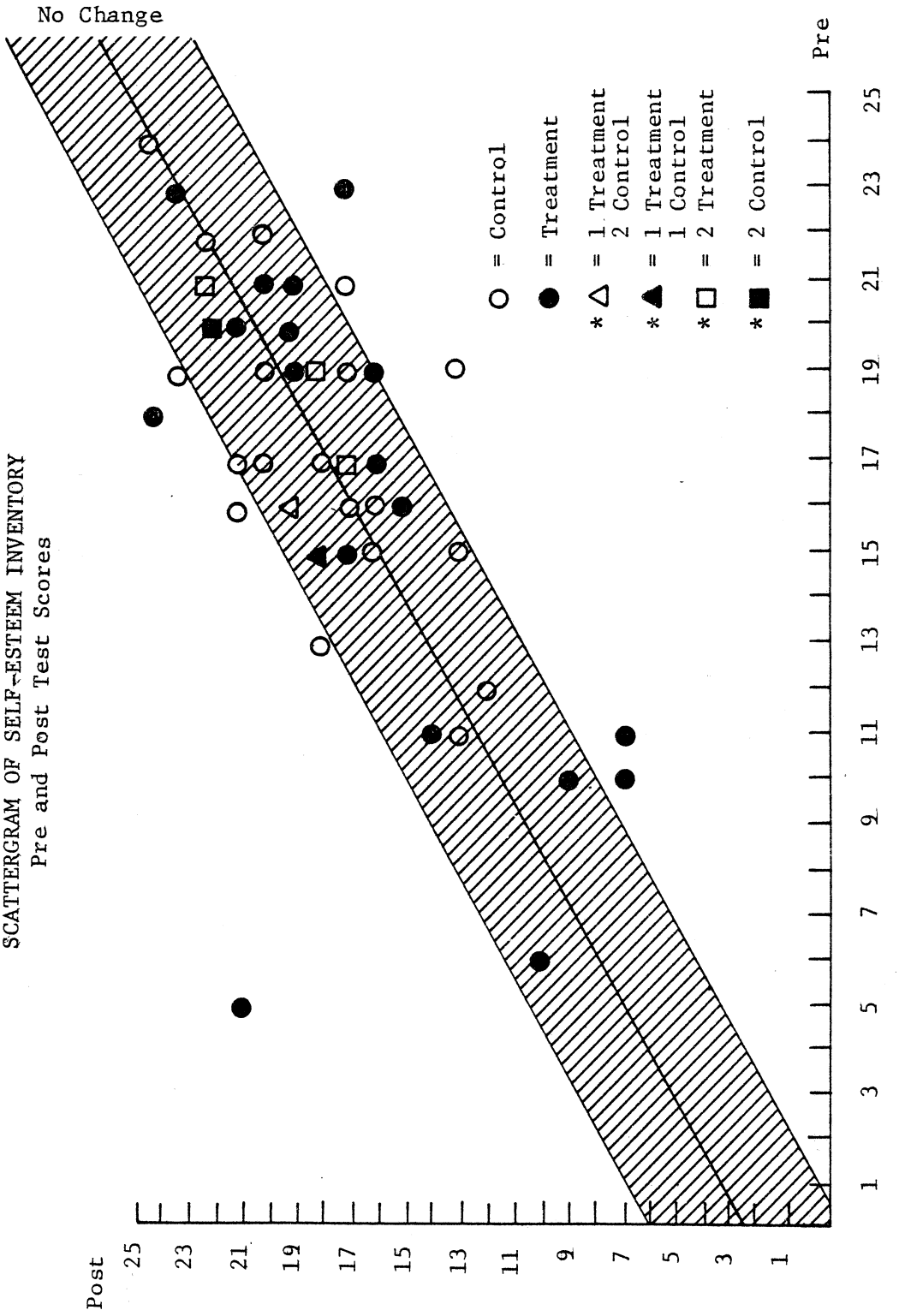


Table 6

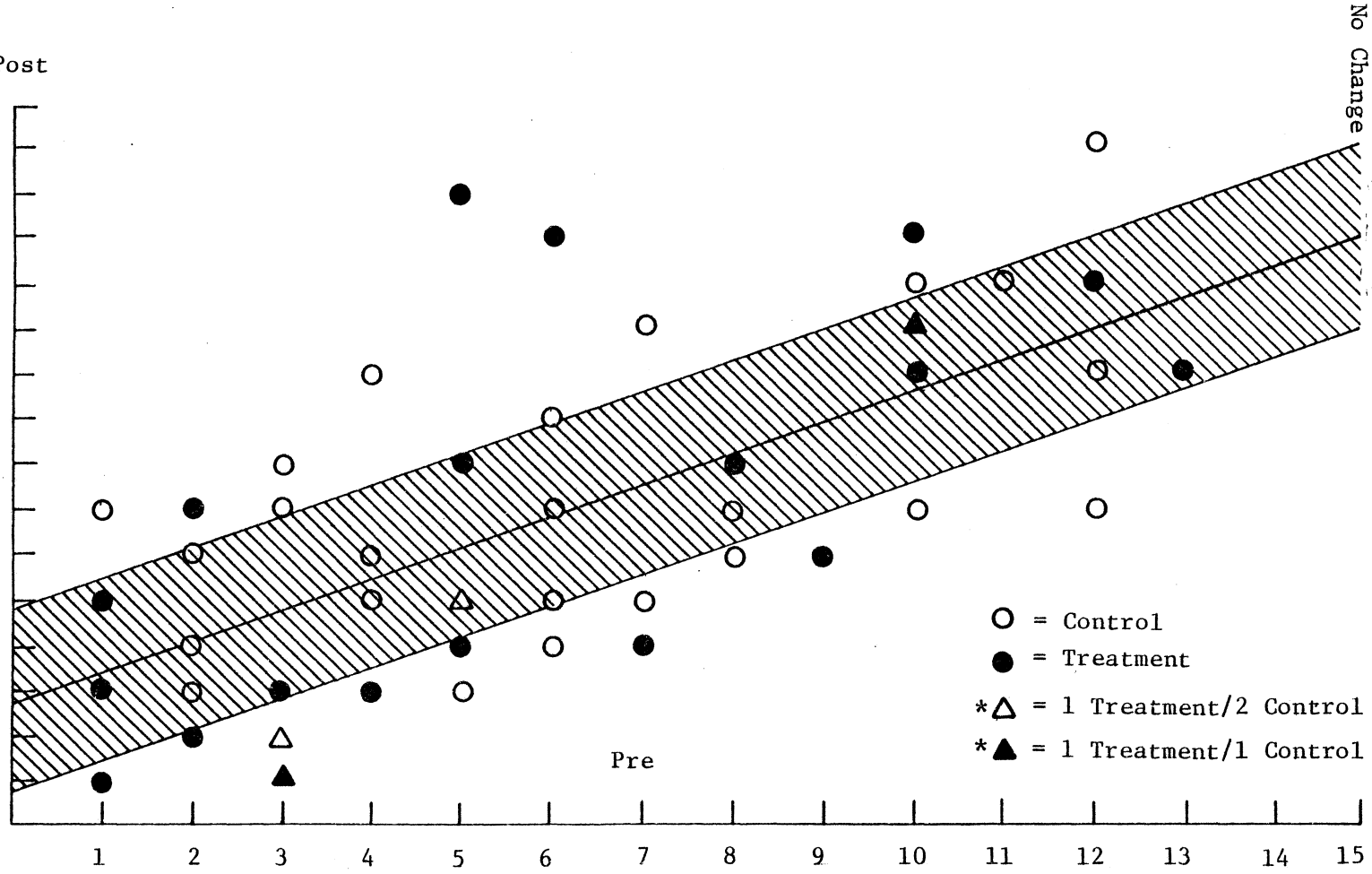
SCATTERGRAM OF SELF-ESTEEM INVENTORY
Pre and Post Test Scores



*Triangle and Square symbols refer to location on graph where two or more students fall silumtaneously.

Table 7

SCATTERGRAM OF NOWICKI-STRICKLAND LOCUS OF CONTROL SCALE FOR CHILDREN
Pre and Post Test Scores



*Triangle symbol refers to location on graph where two or more students fall simultaneously.

of change on two instruments. Sex does not appear to explain any differential change for the variables in question. The percentage of change for Tables 8, 9 and 10 was calculated by counting the frequency in which each category of participant fell in the respective category of change, and by finding the percentage of cell frequency in regard to the total number of participants.

In overall percentage of change from the pre to the posttest on the Career Development Inventory the greatest change was found in the control group to be in the category of Little Positive Change (18%). The next total highest percentages of change from the pre to the posttest were found in the experimental group in the categories of Little Positive Change (16%) and No Change (14%). The least total change was found in the category of Large Negative Change. No percentage of change was indicated for the experimental or for the control group in this area.

According to the variable of sex, the girls in the experimental group in the area of No Change (10%), boys in the experimental group in the area of Little Positive Change (12%), and girls in the control group in the area of Little Positive Change (10%), exhibited the highest percentage of change.

In total change from the pre to the posttest on Coopersmith's Self-Esteem Inventory the highest percentages of change were found for the control group in the catagories of No Change (12%), and Little Positive Change (12%), and for the experimental group in the category of Some Positive Change (12%). The category exhibiting the next

Table 8

CAREER DEVELOPMENT INVENTORY

	Control			Experimental		
	Boys	Girls	Total	Boys	Girls	Total
No Change (± 15)	6%	4%	10%	4%	10%	14%
Little Positive Change (+16 to +50)	8%	10%	18%	12%	4%	16%
Little Negative Change (-16 to - 50)	0%	6%	6%	0%	2%	2%
Some Positive Change (+51 to +100)	4%	4%	8%	4%	2%	6%
Some Negative Change (-51 to -100)	4%	2%	6%	2%	0%	2%
Large Positive Change (+101 and above)	0%	8%	8%	2%	2%	4%
Large Negative Change (-101 and above)	0%	0%	0%	0%	0%	0%

Table 9

COOPERSMITH'S SELF-ESTEEM INVENTORY

	Control			Experimental		
	Boys	Girls	Total	Boys	Girls	Total
No Change (Same Score)	4%	8%	12%	4%	0%	4%
Little Positive Change (+1)	2%	10%	12%	0%	2%	2%
Little Negative Change (-1)	2%	2%	4%	4%	6%	10%
Some Positive Change (+2 or +3)	4%	6%	10%	6%	6%	12%
Some Negative Change (-2 or -3)	0%	6%	6%	4%	2%	6%
Large Positive Change (+4 or more)	6%	2%	8%	4%	2%	6%
Large Negative Change (-4 or more)	2%	2%	4%	2%	2%	4%

Table 10

THE NOWICKI-STRICKLAND LOCUS OF CONTROL SCALE FOR CHILDREN

	Control			Experimental		
	Boys	Girls	Total	Boys	Girls	Total
No Change (Same Score)	2%	0%	2%	6%	8%	14%
Little Positive Change (+1)	2%	8%	10%	0%	2%	2%
Little Negative Change (-1)	2%	4%	6%	2%	4%	6%
Some Positive Change (+2 or +3)	2%	8%	10%	4%	2%	6%
Some Negative Change (-2 or -3)	6%	8%	14%	2%	6%	8%
Large Positive Change (+4 or more)	6%	6%	12%	6%	2%	8%
Large Negative Change (-4 or more)	0%	2%	2%	0%	0%	0%

highest total change from the pre to the posttest in the control group was in the area of Some Positive Change (10%), and in the experimental group in the area of Little Negative Change (10%). The only category exhibiting no total change from the pre to the posttest was the area of Little Positive Change (0%) in the experimental group.

According to the variable of sex, the highest percentages of change on the Self-Esteem Inventory were found in the control group for girls in the category of Large Positive Change (10%), and the area of No Change (8%). The categories showing no percentage of change from the pre to the posttest, according to sex, were boys in the control group in the category of Some Negative Change (0%), and in the experimental group for boys in the category of Little Positive Change (0%), and for girls in the category of No Change (0%). There was no consistency of total change by group or by sex demonstrated from the pre to the post measures on Coopersmith's Self-Esteem Inventory.

In total change from the pre to the posttest on the Nowicki-Strickland Locus of Control Scale for Children the greatest percentages of change were found in the control group in the areas of Some Negative Change (14%), and Large Positive Change (12%), and in the experimental group in the area of No Change (14%). The categories exhibiting the least total change in the control group were the No Change area (2%), and Large Negative Change (2%), while in the experimental group (0%) of change was found in the category of Large Negative Change, and (2%) of change was found in the area of Little Positive Change.

Analysis of change according to sex revealed that the highest total change for the control group with boys was in the categories of Some Negative Change (6%) and Large Positive Change (6%). In the experimental group the highest change for boys was found in the categories of No Change (6%) and Large Positive Change (6%). For girls in the control group the highest percentages of change were found in the categories of Some Negative Change (8%), Little Positive Change (8%), and Some Positive Change (8%), and for girls in the experimental group in the area of No Change (8%).

In the control group (0%) of change was found for boys in the area of Large Negative Change and for girls in the area of No Change. In the experimental group (0%) of change from the pre to the posttest was found for boys in the category of Little Positive Change and Large Negative Change, and for girls in the category of Large Negative Change. As indicated earlier, no obvious consistency of change was found from the pre to the posttest by sex or by group, or between any of the three instruments. There were scattered patterns of consistent change on two instruments exhibited by only a few students. No students exhibited a consistent pattern of change on all three instruments.

In the experimental and the control groups the students were asked at the beginning of the semester and again at the end of the semester to state their career choice. In stated career preference, as depicted in Table 11, the experimental group (46%) exhibited a higher total percentage change from the pre to the post measure than did the control group (36%).

Table 11

CAREER PREFERENCE

	Boys	Girls	Total
Control Group	7%	29%	36%
Experimental Group	23%	23%	46%

According to change by sex, (7%) of the boys in the control group indicated a change in career preference from the pre to the post measure, while a larger percentage, (23%), of the boys in the experimental group indicated a change in career preference.

The girls in the control group exhibited a slightly larger percentage of change in career preference, (29%), while (23%) of the girls in the experimental group exhibited a change in career preference from the pre to the post measure.

Summary

The analysis of the data was presented in this chapter. The null hypothesis of this study stated that there would be no significant difference in vocational maturity, self-esteem enhancement, or locus of control (independent/responsible behavior) between a control and experimental group of students. When subjected to multivariate analysis of covariance it became apparent that significant differences did not exist at an alpha level of $< .05$ on any of the three tests between the experimental and control groups of students. The results of the statistical tests dictated a failure to reject the null hypothesis.

First, the mean scores, adjusted mean scores, and standard deviations on the three instruments were presented and discussed in this chapter. Second, the data were analyzed descriptively, with the scores obtained on the three instruments being plotted and analyzed. Next, the data were analyzed to determine the percentage of total change and change exhibited by boys and by girls in the various

categories from the pre to the posttests. The chapter was concluded with an analysis of change in stated career choice, by sex and by group, from the beginning of the semester to the end of the semester.

Chapter 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

Self-acceptance and locus of control (independent/responsible behavior), the focus of this study, appeared to be two factors that are important to the students' career development. Specifically, the basic question posed was: Does participation in a Clusters Approach to Career Orientation class result in a significant change in career maturity, self-esteem and locus of control of seventh-grade students?

The review of literature revealed that the purpose of career education in the junior high school has been regarded as leadership in the student's exploration of the nature, interests, limitations, and capabilities of himself, as well as exploration into the world of occupations. Preparation toward making decisions regarding choice of curriculum in high school as well as the preparation to choose a method by which he will earn a living are also goals of career education in the junior high school.

The period of adolescence is considered to be a time when students have just begun to consider such personal characteristics as interests, values, and abilities as well as an understanding of the nature and requirements of occupations. The review of literature pointed to the fact that there existed a lack of vocational information and experience available to junior high school pupils, and that there

existed a need for greater correlation between subject matter and career information.

The literary treatment in exploring the dynamics of self (the image one holds of himself with regard to his attitudes, values, and behavior--the kind of person he is and how he feels about himself as that kind of person) has suggested that the individual's perception of self is a primary factor in determining his behavior and his resulting career choice (Combs and Snygg, 1959). Applying this to the process of formalized education, numerous researchers have concluded that the individual's self-esteem is positively related to his performance within an academic setting (Cronbach, 1970).

With reference to the variable of locus of control, the findings of investigators, as cited in the review of literature, tended to form an orderly cluster which was theoretically consistent with the construct of internal-external control as a personality variable. The findings generally depicted External individuals, in contrast to Internals, as being relatively anxious, aggressive, dogmatic, inhibited, less trustful and more suspicious of others, possessing low self-esteem and insight, and generally lacking in career decision-making skills. Studies such as Lefcourt and Ludwig, 1965, however, have indicated that external control and its corresponding personality correlates can be modified to a more desirable internal frame of reference.

The purpose of this study was to assess the extent to which career maturity, self-esteem and locus of control changes occurred,

and to compare any differences in change in the level of these three variables between two student groups in a rural Southwest Virginia school district over the period of a semester. Three instruments, the Career Development Inventory, Coopersmith's Self-Esteem Inventory and the Nowicki-Strickland Locus of Control Scale for Children were administered, under standardized conditions, at the beginning of the second semester of the 1976-77 school year, and again during the last week of classes of the same semester. The subjects consisted of an experimental group of academically accelerated seventh-grade students who received a semester of a Clusters Approach to Career Orientation class and a comparable group of accelerated seventh-grade students from the same rural county who did not receive the career class. The sample size was fifty. Twenty-eight of these students were in the control group and twenty-two students were in the experimental group, receiving the career treatment.

Multivariate analysis of covariance (MANCOVA) was employed to test the null hypothesis. This technique permitted adjustment of the posttest mean scores, prohibiting any initial differences of pretest scores from falsely influencing any ultimate differences that might be discovered. The null hypothesis of the study was not rejected, resulting in the failure to conclude that there were significant differences ($p < .05$) on the variables of vocational maturity, self-esteem enhancement or locus of control of students after they had participated in a career orientation class.

Conclusions

Based on the results of this study, it was concluded that participation in a career orientation class did not result in increased vocational maturity, self-esteem enhancement or increased locus of control. The Clusters Approach to Career Orientation class, in fact, seemed to have a negative effect on the self-esteem and locus of control scores and a negligible effect on the vocational maturity scores of the seventh-grade students in the experimental group.

This study attempted to determine the impact of CACO on the students' career aspirations and resulting career maturity. A purpose of CACO is to assist individuals in gaining insights and competencies which will allow them to relate realistically to career development, thus facilitating independent planning, decision-making and adjustment. While the students taking CACO did score higher on the posttest of the Career Development Inventory than did the students not receiving this class, the gain was slight.

Another objective of this study was to determine the impact of CACO on the students' self-esteem. Coopersmith (1967) in his study of self-esteem concluded that individuals with low self-esteem lack the capacity to define and to deal with their environment, but they may learn to do so more rapidly and efficiently if they are exposed to more effective methods of operating. Coopersmith's (1967) studies indicated that a structured setting, such as the CACO program, in which an individual is aided in examining his basis for evaluation in terms of his self-esteem and capacities may be conducive to positive self-

concept development. The results of this study revealed that students in the control group scored higher on the posttest of Coopersmith's Self-Esteem Inventory than did those students in the experimental group who received the CACO treatment.

This study also explored change in locus of control (independent/responsible behavior), after students had undergone the CACO experience. If an individual feels he has power to take charge of his own life and if he acts on this belief it is thought that his behavior should be apparent. Although all persons are to some extent under the influence of others, it is felt that the individual who is personally empowered is relatively detached from outside forces of appraisal, and relies more on himself in making decisions and taking responsibility for himself. In contrast, the dependent person is insecure, uncertain, and requires the "reassurance of external confirmation and appraisal" for direction and decision-making (Coopersmith, 1967). The CACO class, contrary to expectations, seemed to have a negative effect on the posttest locus of control scores for the experimental group of students, as well as for the previously mentioned self-esteem scores for this group.

In the review of the literature it was found that all three instruments used in this study, to some extent, were involved in previous studies which had problems with validity. Furthermore, the random change in scores from the pre to the posttest, evident in this study, constitutes error and is often a source for a lack or reliability. Initially, one might conclude from the statistical analysis of

this study, that little is to be gained through using vocational maturity, self-esteem, or locus of control instruments in attempting to learn more about the impact of a career education class such as CACO on students.

Implications

The foregoing conclusions concerning the results of this study have implications for additional consideration and research. A major implication that must be considered is that the students involved in the Clusters Approach to Career Orientation class may have been inadvertently exposed to certain experiences that might have resulted in an anxious state or in increased anxiety. A study conducted by Winkler and Myers (1963) revealed that self-acceptance and anxiety measures for the same subjects are highly correlated. They also indicated that high self-acceptance (congruence between self and ideal self-concepts) is associated with low anxiety scores. Jersild (1957) stated additionally that anxiety is a condition arising from thoughts, feelings, and impulses that are out of harmony with what a person expects of himself.

In light of this description of anxiety, as well as the inverse relationship between level of self-esteem and level of anxiety, it seems possible that individuals in the experimental group could have experienced an anxious state or perhaps increased anxiety associated with the career cluster activities, particularly in the area of study dealing with analysis of self.

Another implication of the study is the possibility that some

of the students could have been reluctant to participate in introspective experiences. Hurlock (1973:338) stated that many more adolescents are self-rejectant than self-acceptant, especially boys and especially in the early years of adolescence. She pointed out further that self-rejection comes mainly from having a real self-concept that falls short of the ideal self-concept. Jersild revealed that the value a student might derive from criticism may be lost because of the welling up of anxiety and Hurlock (1973) indicated that the adolescent often rejects critical evaluation of himself. It was found that several of the career cluster strategies encourage critical self-evaluation as well as constructive criticism from others.

Stewart (1975:684) cautioned against experiences in the classroom which might inadvertently apply peer pressure. Hurlock (1973) also indicated that the adolescent's self-regard vacillates with the attitudes of others toward him. In this career cluster class the sociogram, interview, case study, development of a self-profile, debating, and various gaming activities were employed to facilitate awareness of individual personality characteristics. Many of the strategies and the social aspects of the methodology of the CACO class, consequently, are highly conducive to peer pressure. The demands for public affirmation and action which is an important part of certain CACO activities, in addition to being highly judgmental, is also potentially dangerous, especially when one is working with teenagers. As Stewart (1975) said, once the stand has been taken in reference to peer acceptance, there is a tendency to live with it.

A study conducted by Rutan revealed another implication that could have effected the self-enhancement and independent/responsible behavior scores of the treatment group. Rutan (1971) discovered that in groups where individuals develop a sense of trust in their relationships, self-acceptance will be increased. In this study, the experimental group came together in the CACO class for the first time at the beginning of the second semester. According to Dansereau's (1969) findings a new setting often creates a threat to students' self-esteem.

The experimental group of students had to make two adjustments that were not present for the control group. First, there as an adjustment to be made as the students began to work together as a group for the first time. Early in the semester the students also had an additional adjustment to make when their CACO teacher was promoted to assistant principal and a new teacher took her place. The original teacher was female and the replacement was male. There were obvious differences between the two teachers in classroom management and discipline. The control group did not have to make these two adjustments because they were in the same class with the same teacher for the entire year. The atmosphere that prevailed in the control classroom was noticeably warm, open and easy-going. The implication of the interaction with the one teacher in the control group as compared to the two teachers in the experimental group, could have had an important effect on the outcome of this study.

Since time could be an important implication, it should be noted that, due to inclement weather, the semester was shortened.

The students did not attend school during the month of January, so the second semester did not begin until February. The possibility exists that in the time spent in the CACO class the students did not develop a feeling of trust in the new teacher and/or the other students. This could be of particular relevance to the strategies employed to facilitate awareness of individual personality characteristics, because these self-awareness activities were the first activities undertaken in the CACO class.

Responses to the Career Development Inventory have indicated a factor that could have contributed to the inverse relationship of the resulting posttest scores. It is possible that students did not know how to assimilate what they already knew and what they had learned from the career cluster class with appropriate application to the statements found on the CDI. The CDI was chosen by the directors of CACO as an evaluation instrument, and it appears to be one of the best vocational maturity measures presently available for the middle school level. Caution must be taken, however, in interpreting and generalizing results, considering the present stage of development of the CDI.

The failure to anticipate the results of no significant differences for this study suggests two additional factors to be considered. One, Coopersmith's Self-Esteem Inventory and the Nowicki-Strickland Locus of Control Scale for Children might not be adequate measures of self-esteem assessment and independent/responsible behavior for the population from which the subjects of this study were

drawn. Secondly, the elusiveness of the concept of self suggests that perhaps no single instrument should be expected to yield complete data.

There are certain factors to be considered in locus of control studies which may have had a bearing on the outcome of this study. As stated in the research, Hjelle (1970) has suggested a possible implication for the negative findings in locus of control studies. Many students may have learned to think externally as a defense against failure, but are highly competitive (internal). That is, there is an over abundance of students whose scores on the Internal-External scale are external due to these defenses against failure, but who are internals in the respect that they have trained themselves to work hard and to compete with others to achieve their goals.

An additional implication is that greater ability could conceivably result in higher locus of control scores. The students in both the control group and experimental group were considered academically accelerated. The IQ scores were not analyzed, however, and there were more students participating in the control group (28) than in the experimental group (22), so it is possible that overall ability was greater in the control group.

Additional factors might be presented regarding the reasons for the results found in this study. Perhaps one of the most apparent factors relates to the amount of time given to individual self-esteem enhancement and development of independent/responsible behavior in the Clusters Approach to Career Orientation class. It appears that, at the time this data was gathered, enhancement of individual self-esteem,

although implied by the activities relating to awareness of self, was not a primary or stated objective of the CACO curriculum, or if such enhancement was an objective, other factors prohibited the achievement of the objective. Furthermore, the CACO program is not structured to have an intense treatment. Behavior modification would be a much stronger approach than the informal treatment given in the CACO class. The CACO class was for one semester only, In a sense, enhancement of self-esteem or increased locus of control in a semester is tantamount to trying to overcome something that has been developing for thirteen years or more. It also seems possible that factors such as immediate exposure to career skills do not automatically generate a higher level of vocational maturity.

As presented in Chapter 4, there were no significant differences found between the experimental and control group on the variables of self-esteem enhancement, and locus of control. However, it is difficult to determine whether or not there might have been a lack of emphasis on self-esteem enhancement in the CACO class, as previously mentioned, or whether the general level of self-esteem and locus of control failed to change appreciably because of the external influences.

Another implication of this study is that external factors which cannot be controlled might have as much potential for impact on the individual's self-esteem and his independent/responsible behavior as do his experiences in a career cluster class. The experimental group of students spent one sixth of their school day in the CACO

class, and only approximately six hours at school, before returning to a non-academic environment. It seems logical that the setting which was external to the CACO class could have had great potential for counter-influence on students' self-esteem enhancement and locus of control simply because they spent a much greater amount of time in the external environment.

Hopefully, the findings of this study and similar studies will also make educators and students more aware of the advantage of the many opportunities offered by the various career education programs. The need for further research is apparent before one can completely decide the value of the use of such instruments as were used in this study with students enrolled in a career cluster class.

Recommendations

The following recommendations are based on the research and findings of this study:

1. This study should be replicated involving other and larger populations at different age levels and in different geographic settings. The findings of this study apply only to seventh-grade students in a specific educational setting.

2. Additional studies should be conducted which would explore the correlation between the variables of self-concept, academic performance, and career choice.

3. The study should be replicated, using additional vocational maturity, self-esteem and locus of control instruments and emphasizing classroom treatments relating to the development of self-esteem.

4. The study should be replicated with pretest/posttest design covering the span of an academic year rather than one semester.

5. Perhaps one of the most productive investigations would be to conduct a follow-up study with the subjects involved in this research. By administering the same instruments, to the same subjects, two, five or even ten years later, one could determine the effects of delayed treatment.

6. Further study is needed to determine the effects of self-esteem on subject anxiety. In this study, the self-acceptance scores could have been influenced by factors relating to the students' level of anxiety.

7. Additional studies conducted with the experimental and control groups being matched on the variables of age, IQ, and sex would perhaps be more rewarding than studies which do not take all three of these variables into consideration.

8. Further studies need to be developed based on a treatment using random assignment of students.

9. Administrators and teachers need to be made aware of the importance of self-esteem enhancement and locus of control, and the methods through which these variables can be enhanced.

BIBLIOGRAPHY

BIBLIOGRAPHY

Adams, James F., ed. Understanding Adolescence. Boston: Allyn and Bacon, 1973.

Agne, Russell M. and Robert J. Nash. "School Counselors: The Conscience of Career Education," The School Counselor. November, 1973, 21:90-101.

Anastasi, A. Psychological Testing. 3rd. ed. New York: Macmillan Co., 1969.

Anderson, Dale G. and Robert A. Heimann. "Vocational Maturity of Junior High School Girls," Vocational Guidance Quarterly. March, 1967, 15:191-195.

Bailer, I. "Conceptualization of Success and Failure in Mentally Retarded and Normal Children," Journal of Personality. 1961, 29:303-320.

Bailey, Larry J. and Ronald D. Stadt. Career Education: New Approaches to Human Development. Bloomington: McKnight Publishing Co., 1973.

Battle, E. S. and J. B. Rotter. "Children's Feelings of Personal Control as Related to Social Class and Ethnic Group," Journal of Personality. 1963, 31:482-490.

Blair, Glenn Myers and R. Stewart Jones. Educational Psychology. Macmillan Co.: New York, 1963, 72-102.

Blocher, Donald H. and R. A. Schultz. "Relationships Among Self-Descriptions, Occupational Stereotypes, and Vocational Preferences," Journal of Counseling Psychology. 1961, 8:314-317.

Bottoms, Gene and Debera Sharpe. "Career Education: A Broadening Educational Perspective," The School Counselor. November, 1973, 21:121-128.

Brown, J. C. and B. R. Strickland. "Belief in Internal-External Control of Reinforcement and Participation in College Activities," Journal of Consulting and Clinical Psychology. 1972, 38:148.

Borow, H., ed. Man In a World of Work. Boston: Houghton Mifflin Co., 1964, 4:77-82.

Buros, O., ed. The Seventh Mental Measurements Yearbook. Highland Park, N.J.: Gryphon Press, 1972, 73-104.

Carey, Marsha Ann. An Evaluation Study of an Experience-Based Career Education Program. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, 1976, 53-62.

Catron, David W. "Educational-Vocational Group Counseling: The Effects on Perception of Self and Others," Journal of Counseling Psychology. Summer, 1966, 13:202-207.

Clyde, Dean J. Multivariate Analysis of Variance on Large Computers. Florida: Clyde Computing Service, 1969.

Cole, Luella and Irma N. Hall, M. A. Psychology of Adolescence. New York: Holt, Rinehart and Winston, Inc., 1970, 275-285.

Combs, A. W. and D. Snygg. Individual Behavior. New York: Harper and Row, 1949, 130-134.

Coopersmith, S. The Antacedants of Self-Esteem. San Francisco: W. H. Freeman and Co., 1967, 38-78.

Crandall, V. C., W. Katkovsky and V. J. Crandall. "Children's Beliefs in Their Own Control of Reinforcements in Intellectual-Academic Achievement Situations," Child Development. 1965, 36:91-109.

Crites, J. O. Vocational Psychology. New York: McGraw Hill, 1969.

Cromwell, R. L. "A Social Learning Approach to Mental Retardation," Handbook of Mental Deficiency. New York: McGraw Hill, 1963, 41-91.

Cronbach, L. J. Essentials of Psychological Testing. 3rd. ed. New York: Harper and Row, 1970, 31-40.

Crow, Calvin W. Effects of A Vocational Exploration Group Experience on Control Expectancy, Self-Esteem, and Vocational Maturity of High School Students. Unpublished doctoral dissertation, Arizona State University, 1973.

Dansereau, R. A. "Motivating Students," Improving College and University Teaching. Spring, 1969, 110-111.

Davis, Charletta B. A Study of Rural and Urban Youth: Their Vocational Maturity, Idealistic Educational Aspirations, Realistic Educational Aspirations, and Occupational Aspirations. Unpublished doctoral dissertation, University of South Carolina, 1972, 68-75.

Dean, D. G. "Alienation: Its Meaning and Measurement," American Sociological Review. 1961, 26:753-758.

Dugger, William E., Jr., Ralph Ressler, Shirley H. Gerkin, and Frank C. Owens. A Rationale and Structure for "A World of Choice: Careers and You. Blacksburg: Virginia Polytechnic Institute and State University, 1976, 53-62.

Evans, Rupert, Kenneth Hoyt and Garth Mangum. Career Education in the Middle/Junior High School. Salt Lake City: Olympus Publishing Co., 1973, 49-55.

Field, Frank L. "A Taxonomy of Educational Process, The Nature of Vocational Guidance, and Some Implications for Professional Preparation," Vocational Guidance: A Reconceptualization, National Vocational Guidance Association Project. Ohio Department of Education: Division of Guidance and Testing, June, 1967, 1-31.

Fitts, W. H. The Self-Concept and Performance. Nashville: Counselor Recordings and Tests, 1972.

Forrest, D. J. and A. S. Thompson. "The Career Development Inventory," National Vocational Guidance Monograph, 1974.

Frankel, E. "Effects of a Program of Advanced Summer Study on the Self-Perceptions of Academically Talented High School Students," Exceptional Children. June, 1964, 245-249.

Fredenburgh, F. A. The Psychology of Personality and Adjustment. Menlo Park: Cummings Publishing Co., 1971, 94-96.

Garrison, Karl C. and Karl C. Garrison, Jr. Psychology of Adolescence. Englewood Cliffs, New Jersey: Prentice Hall, 1975, 42-47.

Ginzberg, E. "Toward a Theory of Occupational Choice," Personnel and Guidance Journal. 1952, 30:491-494.

_____. "Toward a Theory of Occupational Choice: A Restatement," Vocational Guidance Quarterly. 1972, 20:169-176.

Goodman, L. V., ed. "Marland on Career Education," American Education. 1971, 25-28.

Graves, T. D. "Time Perspective and the Deferred Gratification Pattern in a Tri-Ethnic Community," Tri-Ethnic Research Project. University of Colorado, Institute of Behavioral Science, 1961, 8-12.

Greene, S. D. The Relationship Between a Developing Career Education Program and the Career Maturity of Secondary School Students. Unpublished doctoral dissertation, Kansas State University, 1973.

Gysbers, N. and E. J. G. Moore, eds. "Career Development in the Schools," Contemporary Concepts in Vocational Education. First Yearbook of the American Vocational Association, 1971.

Hall, Calvin, S. and Gardner Lindzey. Theories of Personality. New York: John Wiley, 1970, 56-78.

Hansen, Lorraine Sundal. Career Guidance Practices in School and Community. National Vocational Guidance Association, Washington, D.C., 1970, 135-182.

_____. "A Model for Career Development Through Curriculum," Personnel and Guidance Journal. 243-250.

Hansen, J. C. and R. R. Stevic. Appalachian Students and Guidance. Boston: Houghton Mifflin Co., 1971, 89-95.

Healy, C. C. "Evaluation of a Replicable Group Career Counseling Procedures," The Vocational Guidance Quarterly. Fall, 1974, 34-40.

Herr, C. C. Decision-Making and Vocational Development. Boston: Houghton Mifflin Co., 1970.

Hjelle, L. A. "Social Desirability as a Variable in the Locus of Control Scale," Psychological Reports. 1971, 807-816.

Hills, D. A. and J. E. Williams. "Effects of Test Information Upon Self-Evaluation in Brief Educational-Vocational Counseling," Journal of Counseling Psychology. 1965, 275-281.

Hilton, T. L. "Using Measures of Vocational Maturity in Evaluation," Measuring Vocational Maturity for Counseling and Evaluation. Donald E. Super, ed. National Vocational Guidance Association, 1974, 34-56.

Holland, John L. The Psychology of Vocational Choice. Waltham, Massachusetts: Blaisdell Publishing Co., 1966, 1-40.

_____. Making Vocational Choices: A Theory of Careers. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1973, 107-118.

Hoppock, Robert. Occupational Information. New York: McGraw Hill Book Co., 1967.

Horrocks, John E. and Dorothy Jackson. Self and Role: A Theory of Self-Process and Role Behavior. Boston: Houghton Mifflin Co., 1972, 123-133.

Howard, Alvin W. and George C. Stoumbia. The Junior High and the Middle School: Issues and Practices. Seraton: Intest Education Publications, 1970, 3-8.

Hoyt, Kenneth B. Career Education and Occupational Education: An Approach to Defining Differences. Columbus: The Ohio State University, Center for Vocational Education, 1974.

_____. "Evaluation of Career Education: Implication for Instruction at the Elementary School Level," Journal of Career Education. vol. 1, no. 4, 1975, 69-79.

Hoyt, Kenneth B., Rupert N. Evans, Edward F. Mackin and Garth L. Mangum. Career Education: What It Is and How To Do It. Salt Lake City: Olympus Publishing Company, 1972, 44-46.

Hurlock, Elizabeth B. Personality Development. New York: McGraw Hill Book Co., 1967.

Issaacson, Lee A. Career Information in Counseling and Teaching. Boston: Allyn and Bacon, Inc., 1971, 486-487.

Ivey, A. E. and A. S. Alschuler. "An Introduction to the Field," Personnel and Guidance Journal. 1973, 591-597.

James, W. Internal Versus External Control of Reinforcements as Basic Variable in Learning Theory. Unpublished doctoral dissertation, The Ohio State University, 1957, 48-58.

James, W. H., A. B. Woodruff and W. Werner. "Effect of Internal and External Control Upon Changes in Smoking Behavior," Journal of Consulting Psychology. 1965, 184-186.

Jersild, A. T. In Search of Self. New York: Teachers College, Columbia University, 1952.

Jersild, Arthur T., ed. The Psychology of Adolescence. New York: The Macmillan Co., 1965.

Johnson, Carl A., ed. "Resolutions Adopted on Key Issues," American School Counselor Association Newsletter. May 31, 1974.

Jones, J. G. and S. Grieneeks. "Measures of Self Perception and Predictors of Scholastic Achievement," The Journal of Educational Research. 201-203.

Kerlinger, F. N. Foundations of Behavioral Research. New York: Holt, Rinehart and Winston, 1973, 34-35.

Korman, Abraham K. "Self-Esteem as a Moderator of the Relationship Between Self-Perceived Abilities and Vocational Choice," Journal of Applied Psychology. February, 1967, 65-67.

Lao, R. C. "Internal-External Control and Contempt and Innovative Behavior Among Negro College Students," Journal of Personality and Social Psychology. 1970, 263-270.

Lefcourt, H. M. "Internal vs. External Control of Reinforcement: A Review," Psychological Bulletin. 1966, 206-220.

Lefcourt, H. M. and G. W. Ladwig. "Alienation in Negro and White Reformatory Inmates," Journal of Social Psychology. 1966, 153-157.

Levenway, R. W. "The Effect of Stress on Expressed Attitudes Toward Self and Others," Journal of Abnormal and Social Psychology. 225-226.

MacDonald, A. P. "Internal-External Locus of Control and Attitude Toward Sisability." Paper presented at annual meeting of American Personnel and Guidance Association, New Orleans, March, 1971.

Many, M. The Relationship Between Anxiety and Self-Esteem in Grades Four Through Eight. Unpublished doctoral dissertation, Northern Illinois University, 1972.

Marland, Sidney P., Jr. Career Education: More Than a Name. Washington, D.C.: U.S. Department of Health, Education and Welfare, Office of the Commissioner of Education, 1971.

Martin, Ann M. "The Theory and Practice of Communicating Educational and Vocational Information," Guidance Monograph Series. Shelley C. Stone and Bruce Shertzer, eds. Boston: Houghton Mifflin Co., 1971, 78-79.

Massari, D. J. and D. C. Rosenblum. "Locus of Control, Interpersonal Trust and Academic Achievement," Psychological Reports. 1972, 355-360.

McDaniels, Carl. "Youth: Too Young to Choose?" Vocational Guidance Quarterly. vol. 16, 1968.

Medsker, L. L. and D. Tillery. Breaking the Access Barriers. New York: McGraw Hill, 1971.

Miller, Carroll H. Foundations of Guidance. New York: Harper and Brothers, Publishers, 1961.

Morrison, R. L. "Self-Concept Implementation in Occupational Choices," Journal of Counseling Psychology. 1962, 255-260.

Norwicki, S. and J. Roundtree. "Correlates of Locus of Control in a Secondary School Population," Developmental Psychology. 1971, 477-478.

O'Hara, R. P. and D. V. Tiedeman. "Vocational Self-Concept in Adolescence," Journal of Counseling Psychology. June, 1959, 292-301.

Oppenheimer, E. A. "The Relationship Between Certain Self Constructs and Occupational Preferences," Journal of Counseling Psychology. 1966, 191-197.

Osipow, S. H. Theories of Career Development. New York: Appleton-Century-Crofts, 1968.

_____. Implications for Career Education of Research and Theory on Career Development. Columbus: Ohio State University, 1972, 67-69.

Phares, E. J. "Expectancy Changes in Skill and Chance Situations," Journal of Abnormal and Social Psychology. 1957, 339-342.

Phares, E. J., Ritchie, and W. L. Davis. "Internal-External Control and Reaction to Threat," Journal of Personality and Social Psychology. 1968, 402-405.

Pietrofesa, John J. "Self-Concept: A Vital Factor in School and Career Development," Clearing House. September, 1969, 37-40.

Pietrofesa, John J., George E. Leonard and William Van Hoose. The Authentic Counselor. Chicago: Rand McNally, 1972.

Powell, A. "Alternative Measures of Locus of Control and the Prediction of Academic Performance," Psychological Reports. 1971, 47-50.

Pugh, D. A. A Comparison of Changes Over a Period of Time in the Self-Concepts of Students Enrolled in Vocational and Non-Vocational Curricula. Unpublished doctoral dissertation, Ohio State University. 1969, 102-105.

Purkey, W. W. Self-Concept and School Adjustment. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1970, 5-8.

Randolph, Daniel L. and Larry B. Grantham. "A Behavior Management Approach vs. A Traditional Approach to Career Education," Vocational Guidance Quarterly. June, 1973, 293-297.

Robinson, John R. and Phillip R. Shaver. Measures of Social Psychological Attitudes. Ann Arbor: The University of Michigan Institute for Social Research, 1973, 206-216.

Rosenberg, Morris. Society and the Adolescent Self-Image. Princeton, New Jersey: Princeton University Press, 1965, 90-95.

Roth, Marvin J. Career Awareness in the Elementary School. Unpublished doctoral dissertation. Utah State University, 1972.

Roth, Marvin, M. Roth, David B. Hershenson and Thomas Hillard. The Psychology of Vocational Development. Reading in Theory and Research, Boston, 1970.

Rotter, J. B. Social Learning and Clinical Psychology. Englewood Cliffs, New Jersey: Prentice-Hall, 1954, 87-98.

_____. "Generalized Expectancies for Internal Versus External Control of Reinforcement," Psychological Monographs. 1966, 80-81.

Rutan, J. Scott. Self Acceptance Change as a Function of a Short Term Small Group Experience. Unpublished doctoral dissertation. Boston University, 1971.

Ryan, Charles W. Career Education: A Handbook for Funding Sources. Boston: Houghton Mifflin Co., 1973-74, 107-118.

Sears, Pauline S. and Vivian S. Sherman. In Pursuit of Self-Esteem (Case Studies of Eight Elementary School Children). Belmont, California: Wadsworth Publishing Co., 1966, 2-35.

Seeman, M. and J. Evans. "Alienation and Learning in a Hospital Setting," American Sociological Review. 1962, 772-782.

Severinsen, K. Norman. Career Guidance: An Individual Developmental Approach. Columbus, Ohio: Charles E. Merrill Publishing Co., 1973.

Sillin, Percy P. Implementation and Evaluation on an Elementary Guidance Program. Unpublished doctoral dissertation. Kansas State University, 1973.

Smith, Don. An Assessment of Self-Concept Changes During First Term Attendance of Students In a Rural, Appalachian Community College. Unpublished doctoral dissertation. Virginia Polytechnic Institute and State University, 1975.

Stewart, John S. "Clarifying Values Clarification: A Critique," Phi Delta Kappan. June, 1975, 56:684-688.

Strang, Ruth. The Adolescent Views Himself. New York: McGraw Hill Book Co., 1957, 400-439.

Super, Donald E., et al. Vocational Development: A Framework for Research. New York: Teachers College, Columbia University, Bureau of Publications, 1957.

Super, Donald E. and P. Overstreet. "The Vocational Maturity of Ninth Grade Boys," Teachers College Press. Columbia University, 1960.

Super, Donald E., et al. Vocational Development: A Framework for Research. New York: Teachers College Press, 1957, 76-89.

Super, Donald E. Measuring Vocational Maturity for Counseling and Evaluation. National Vocational Guidance, 1974.

Swann, R. N. Blending Career Education into the Middle School Instructional Program: A Model Framework for Teacher Inservice Program. Unpublished doctoral dissertation. Virginia Polytechnic Institute and State University, 1976.

Sweeney, T. J. Rural Poor Students and Guidance. Boston: Houghton Mifflin Co., 1971.

Thoni, R. J. and P. M. Olsson. "A Systematic Career Development Program in a Liberal Arts College," Personnel and Guidance Journal. 1975, 672-675.

United States Office of Education. A Systematic Approach to Evaluating Career Education Materials at the Local Level. Peat, Marwick, Mitchell and Co., November, 1974.

_____. Career Education Status and Needed Improvements. Washington, D.C.: United States General Accounting Office, 1976.

Walz, G. R. Prospectus Life Career Development System. Ann Arbor, Michigan: Human Development Services, 1974.

Wingett, Terry J., Consultant. Letter to Counselors. December 10, 1973.

Winkler, Ronald C. and Roger A. Myers. "Some Concomitants of Self-Ideal Discrepancy Measures of Self-Acceptance," Journal of Counseling Psychology. X, no. 1, 1963, 83-85.

Wylie, R. C. The Self-Concept. Lincoln, Nebraska: University of Nebraska Press, 1961, 171-176.

APPENDIX A

CAREER DEVELOPMENT INVENTORY

Introduction

The questions you are about to read ask you about school, work, your future career and some of the plans you may have made. The only right answers are the ones which are right for you. Give the best answers you can.

Answers to questions like these can help teachers and counselors offer the kind of help which students want and need in planning and preparing for a job after graduation, for vocational and technical school training, or for going to college.

The First Step

Use a number 2 pencil for all the work which follows. Ask your teacher for a pencil if you do not have one. On your answer sheet give four pieces of information: name, sex, birthdate and grade. Your identification number is already marked in.

The Second Step

Each of the following statements has one answer which is better than the others. Circle it. For example:

A good job is easiest to get when you

a. have a skill b. are handsome/pretty c. dress carelessly

After you choose an answer to a question, find the number of the question on the answer sheet and fill in the circle after the number of your answer. Completely erase mistakes or changed answers so they will not be scored. Do not make any extra marks on the answer sheet.

ANSWER ALL QUESTIONS. If you are not sure about an answer, guess. There is no time limit, but work as rapidly as you can; the first answer that comes to you is often the best one.

In your present thoughts and plans, what kind of work would you like to do when you finish all of your education and training? What kind of occupation do you plan to enter? For example, bookkeeper, machinist, lawyer, registered nurse, small store owner, waitress, engineer, shop foreman, elementary teacher, truck driver, etc. Write the name(s) of the occupation(s) you have thought about on the lines below:

_____

_____

_____

_____

_____

If you have given more than one occupation, put an "X" in front of your first choice, the one you prefer more than the others.

Name_____

I. How much thinking and planning have you done in the following areas? What kind of plans do you have? For each question below choose one of the following answers to show what you have done.

A) I have not given any thought to this.

B) I have given some thought to this, but haven't made any plans yet.

C) I have some plans, but an still not sure of them.

D) I have made definite plans, but don't know how to carry them out.

E) I have made definite plans, and know what to do to carry them out.

---

1. Finding out about school and work possibilities by going to the library, sending away for information, or talking to somebody who knows about the possibilities.

2. Talking about career ideas with an adult who knows something about me.

3. Selecting courses which will help me decide what line of work to go into when I leave school or college.

4. Selecting courses which will help me in college, in job training or on the job.

5. Taking part in school or out of school activities which will help me in college, in training, or on the job.

6. Taking part in school or after school activities (for example, science club, school newspaper, Sunday School teaching, volunteer nurse's aide) which will help me decide what kind of work to go into when I leave school.

7. Doing part-time or summer work which will help me decide what kind of work I might go into.

8. Doing part-time or summer work which will help me get the kind of job or training I want.

9. Saving money for college or training.

10. Dealing with things which might make it hard for me to get the kind of training or the kind of work I would like.

11. Getting the kind of training, education, or experience which I will need to get into the kind of work I want.

12. Getting a job once I've finished my education and training.

13. Doing the things one needs to do to become a valued employee who doesn't have to be afraid of losing his job or being laid off when times are hard.

14. Getting ahead (more money, promotions, etc.) in the kind of work I choose.

II. Students differ greatly in the amount of time and thought they give to making choices. Use the statements below to compare yourself to the typical students of your sex in your grade on each of the following kinds of choices.

The amount of time and thought I give to the items below, as compared to my classmates, is . . .

A) Much below average, not as good as most

B) A little below average

C) Average

D) A little above average

E) Much above average, better than most

---

15. Choosing school courses.

16. Choosing school activities.

17. Choosing out-of-school activities.

18. Choosing between college, junior college, business school, technical school, work, military service, marriage, homemaking, etc.

19. Choosing a college, branch of military service, wife or husband, etc.

20. Choosing an occupation for after high school, college, or job training.

21. Choosing a career in general.

22. How would you rate your plans for "after high school?"

    A) Not at all clear or sure.
    B) Not very clear.
    C) Some not clear, some clear.
    D) Fairly clear.
    E) Very clear, all decided.

III. Below are questions about how much you know about the occupation you said you like best on page two. Mark the number of your choice on the answer sheet.

I know . . .

A) Hardly anything

B) A little

C) An average amount

D) A good deal

E) A great deal

---

23. What people really do on the job.

24. Specialities in the occupations.

25. Different places where people might work in this occupation.

26. The abilities and traits needed in the occupation.

27. The physical working conditions.

28. The education or training needed to get into the occupation.

29. The courses offered in school that are best for the occupation.

30. The need for new people in the occupation.

31. Different ways of entering the occupation.

32. The starting pay in the occupation.

33. The chances for getting ahead in the occupation.

IV. Here are five answers which can be used for questions 34 through 47. Use these answers to show whether or not you would go to the sources of information listed below for help in making your job or college plans.

I would go to . . .

A) Definitely not

B) Probably not

C) Not be sure whether to

D) Probably

E) Definitely

---

34. Father or male guardian.

35. Mother or female guardian.

36. Brothers, sisters, or other relatives.

37. Friends.

38. Enroll in a course.

39. Minister, priest, or rabbi.

40. Teachers.

41. School counselors.

42. Private counselors, outside of school.

43. Books with the information I need.

44. Audio or visual aids like tape recordings, movies, or computers.

45. College catalogues.

46. Persons in the occupation or at the college I am considering.

47. TV shows, movies, or magazines.

V. Use the statements below to show which of the sources of information below have already given you information which has been helpful to you in making your job or college plans.

I have received . . .

A) No useful information

B) Very little useful information

C) Some useful information

D) A good deal of useful information

E) A great deal of useful information

. . . from

48. Father or male guardian.

49. Mother or female guardian.

50. Brothers, sisters, or other relatives.

51. Friends.

52. Minister, priest, or rabbi.

53. Teachers.

54. School counselors.

55. Private counselors, outside of school.

56. Books with the information I needed.

57. Audio or visual aids like tape recordings, movies, or computers.

58. School courses.

59. Persons in the occupation or at the college I am considering.

60. TV shows, movies, or magazines.

VI. Each question has its own set of possible answers in this section.

61. Which one of the following is the best source of information about job duties and opportunities?

A) The Encyclopedia Britannica

B) World Almanac

C) Scholastic Magazine

D) The Occupational Index

E) The Occupational Outlook Handbook

62. Which one of the following would be most useful for detailed information about getting into college?

A) The World Book Encyclopedia

B) Webster's Collegiate Dictionary

C) Lovejoy's College Guide

D) Reader's Digest

E) The Education Index

63. Which one of the following pairs of occupations involves the same level or training and responsibility?

A) Tailor, Sales Clerk

B) Engineer, Banker

C) Tailor, Engineer

D) Banker, Sales Clerk

64. The occupational fields expected to grow most rapidly during the next ten years are:

A) Professional and service

B) Sales and crafts

C) Crafts and clerical

D) Labor and sales

65. Between 1910 and 1970, the industry employing the greatest number of workers changed from:

A) Agriculture to wholesale and retail trade.

B) Manufacturing to agriculture.

C) Wholesale and retail trade to manufacturing.

D) Agriculture to manufacturing.

VII. Occupations are different in the amount of education required for employment. Match the occupation in Column A with the amount of education usually required (Column B) by marking the number of the correct answer on the answer sheet.

Column A	Column B
Occupation	Education
66. Stenographer	A) High School Graduation
67. Dental Technician	B) Apprenticeship Training
68. Family Doctor (Physician)	C) Technical School or Community
69. Mail Carrier	D) College (2 year)
70. Plumber	E) College Degree (4 year)
71. Computer Operator	F) Professional Degree Beyond College
72. Bank Clerk	
73. Social Worker	

VIII. Many occupations use special tools. Below is a list of special tools or equipment and a list of occupations. Match the occupation in Column A with its equipment in Column B.

Column A	Column B
Occupation	Equipment
74. Electrician	A) Manikin
75. Bookkeeper	B) Ammeter
76. Bricklayer	C) Centrifuge
77. Dressmaker	D) Trowel
78. Medical Technician	E) Ledger

IX. Each question has its own set of answers in this section.

79. In the 9th and 10th grades, plans about jobs and occupations should:

A) Be clear.

B) Not rule out any possibilities.

C) Keep open the best possibilities.

D) Not be something to think about.

80. Decisions about high school courses can have an effect on:

A) The kind of diploma one gets.

B) The kind of training or education one can get after high school.

C) Later occupational choices.

D) How much one likes school.

E) All of these.

81. Decisions about jobs should take into account:

A) Strengths, (aptitudes and abilities) or what one is good at learning and doing.

B) What one likes to do.

C) The kind of person one is, one's personality characteristics.

D) The chances for getting ahead in that kind of job.

E) All of these.

82. One of the things that many dentists, watch repairpersons, and tailors have in common is:

A) The amount of money they make.

B) The place they work.

C) Their style of work.

D) The tools they use.

83. Mary thinks she might like to become a computer programmer, but she knows little about computer programming. She is going to the library to find out more about it. The most important thing for Mary to know is:

A) What the work is, what she would do in it.

B) What the pay is.

C) What the hours of work are.

D) Where she can get the right training.

84. Jane likes her high school biology and general science courses best. She likes to do her school work alone so she can concentrate. When she begins to think about her future occupation, she should consider:

A) Nurse

B) Accountant

C) Medical Laboratory Technician

D) Elementary School Teacher

85. Peter is the best speaker on the school debating team. The school yearbook describes him as "our golden-tongued orator" - a real nice guy who can listen as well as talk - he could sell refrigerators to the Eskimos. Peter will probably graduate in the bottom half of his class, although his test scores show that he is very bright. His only good grades (mostly B's) are in business subjects. His poorest grades are in English and social studies (mostly C's).

Peter's desire to become a trial lawyer is not very realistic because:

A) With his grades he will have difficulty getting into a four year liberal arts college.

B) He has poor grades in the subjects that are most important for law.

C) There is much more to being a lawyer than being good at public speaking.

D) All of the above are good reasons for thinking that Peter will have a hard time becoming a trial lawyer.

86. The facts about Peter suggest that he should think about becoming:

A) An accountant.

B) A salesman.

C) An actor.

D) A school counselor.

E) A lawyer.

87. Ernie took some tests which show that he might be good at clerical work. Ernie says, "I just can't see myself sitting behind a desk for the rest of my life. I'm the kind of a guy who likes variety. I think being a traveling salesman would suit me fine." He should:

A) Disregard the tests and do what he wants to do.

B) Do what the tests say since they know better than he does what he would be good at.

C) Look for a job which will let him use his clerical abilities but not keep him pinned to a desk.

D) Ask to be tested with another test since the results of the first one are probably wrong.

88. Joe is very good with his hands and there isn't anybody in his class who has more mechanical aptitude. He is also good at art. His best subject at school is math. Joe likes all of these things.

What should Joe do? Should he:

A) Look for an occupation in which he can use as many of his interests and abilities as possible?

B) Pick an occupation which uses math since there is a better future in that than in art or in working with his hands?

C) Decide which of these activities he is best at, or likes the most, and then pick an occupation which uses that kind of activity?

D) Putting off deciding about his future and wait until he loses interest in some of these activities?

89. Betty gets very good science grades but this isn't her favorite subject. The subject she likes best is art even though her grades in it are only average. Betty is most likely to do well in her future occupation if she:

A) Forgets about her interest in art since she is so much better in science.

B) Doesn't worry about the fact that she isn't very good at art, because if you like something you can become good at it.

C) Looks for an occupation which uses both art and science, but more science than art.

D) Looks for an occupation which involves both science and art, but more art than science.

90. Bob says he really doesn't care what kind of work he gets into once he leaves school as long as it is working with people. If this is all Bob cares about he is likely to make a bad choice because:

A) This kind of work usually requires a college degree.

B) Employers usually hire girls for such work.

C) People look down on men who work with people because such work is usually done by girls.

D) Occupations in which one works with people can be very different from each other in the abilities and interests which are needed.

APPENDIX B

PLEASE PRINT

Name_____ Age_____

School_____

Grade_____ Sex M/F Date_____

Directions

On the following page, you will find a list of statements about feelings. If a statement describes how you usually feel, put a check ( ) in the column "LIKE ME." If a statement does not describe how you usually feel, put a check ( ) in the column "UNLIKE ME."

There are no right or wrong answers.

Example:

	LIKE ME	UNLIKE ME
I am a hard worker	( )	( )

Begin at the top of the page and mark every statement.

There are 25 statements to be answered.

Administration time about 6 minutes.

Coopersmith Self-Esteem Inventory

Form B - 25 items

		LIKE ME	UNLIKE ME
1.	I often wish I were someone else.	( )	( )
2.	I find it very hard to talk in front of the class.	( )	( )
3.	There are lots of things about myself I'd change if I could.	( )	( )
4.	I can make up my mind without too much trouble.	( )	( )
5.	I'm a lot of fun to be with.	( )	( )
6.	I get upset easily at home.	( )	( )
7.	It takes me a long time to get used to anything new.	( )	( )
8.	I'm popular with kids my own age.	( )	( )
9.	My parents usually consider my feelings.	( )	( )
10.	I give in very easily.	( )	( )
11.	My parents expect too much of me.	( )	( )
12.	It's pretty tough to be me.	( )	( )
13.	Things are all mixed up in my life	( )	( )
14.	Kids usually follow my ideas.	( )	( )
15.	I have a low opinion of myself.	( )	( )
16.	There are many times when I'd like to leave home.	( )	( )
17.	I often feel upset in school.	( )	( )
18.	I'm not as nice looking as most people.	( )	( )
19.	If I have something to say, I usually say it.	( )	( )
20.	My parents understand me.	( )	( )
21.	Most people are better liked than I am.	( )	( )
22.	I usually feel as if my parents are pushing me.	( )	( )
23.	I often get discouraged at school.	( )	( )
24.	Things usually don't bother me.	( )	( )
25.	I can't be depended on.	( )	( )

APPENDIX C

THE NOWICKI-STRICKLAND PERSONAL REACTION SURVEY

1. Do you believe that most problems will solve themselves if you just don't fool with them? Yes or No

2. Are you often blamed for things that just aren't your fault? Yes or No

3. Do you feel that most of the time it doesn't pay to try hard because things never turn our right anyway? Yes or No

4. Do you feel that most of the time parents listen to what their children say? Yes or No

5. When you get punished does it usually seem it's for no good reason at all? Yes or No

6. Most of the time do you find it hard to change a friend's (mind) opinion? Yes or No

7. Do you feel that it's nearly impossible to change your parent's mind about anything? Yes or No

8. Do you feel that when you do something wrong there's very little you can do to make it right? Yes or No

9. Do you believe that most kids are just born good at sports? Yes or No

10. Do you feel that one of the best ways to handle most problems is just not to think about them? Yes or No

11. Do you feel that when a kid your age decides to hit you, there's little you can do to stop him or her? Yes or No

12. Have you felt that when people were mean to you it was usually for no reason at all? Yes or No

13. Most of the time, do you feel that you can change what might happen tomorrow by what you do today? Yes or No

14. Do you believe that when bad things are going to happen they just are going to happen no matter what you try to do to stop them? Yes or No

15. Most of the time do you find it useless to try to get your own way at home? Yes or No

16. Do you feel that when somebody your age wants to be your enemy there's little you can do to change matters? Yes or No

17. Do you usually feel that you have little to say about what you get to eat at home? Yes or No

18. Do you feel that when someone doesn't like you there's little you can do about it? Yes or No

19. Do you usually feel that it's almost useless to try in school because most other children are just plain smarter than you are? Yes or No

20. Are you the kind of person who believes that planning ahead makes things turn out better? Yes or No

21. Most of the time, do you feel that you have little to say about what your family decides to do? Yes or No

+Items selected for abbreviated scale for grades 7-12.

The vita has been removed from the scanned document

A COMPARISON OF CAREER MATURITY, SELF-ESTEEM, AND LOCUS OF CONTROL BETWEEN STUDENTS ENROLLED AND STUDENTS NOT ENROLLED IN A CLUSTERS APPROACH TO CAREER ORIENTATION CLASS

by

Nancy K. Hart

(ABSTRACT)

The focus of this study was a comparison of seventh-grade students enrolled in a Clusters Approach to Career Orientation class and students not enrolled in this class in order to determine if the career class had any significant effect on the students' career aspirations, self-esteem enhancement, and locus of control (independent/responsible behavior). The school district from which the study was conducted was Carroll County, a basically agricultural county located in Southwest Virginia. The subjects consisted of an experimental group of academically accelerated seventh-grade students at Woodlawn Intermediate School who received a semester of a Clusters Approach to Career Orientation class, and a comparable group of accelerated students from Hillsville Intermediate School who did not receive the career class. The sample size was fifty.

Both groups of students were administered three instruments on a pretest, posttest basis. These instruments, the Career Development Inventory, Coopersmith's Self-Esteem Inventory, and the Nowicki-Strickland Locus of Control Scale for Children were administered the first week of the second semester and again at the end of the

semester. In addition to this investigation, an analysis of change in stated career choice was explored.

The multivariate analysis of covariance (MANCOVA) was the statistical treatment applied to the data. Significant differences did not exist at an alpha level of .05 on any of the three tests, dictating a failure to reject the null hypothesis which stated that there would be no significant difference in career maturity, self-esteem enhancement, or locus of control between the experimental and control groups of students.

While self-esteem and locus of control are believed by many to be major variables associated with the individual's career decision-making process, the findings of this study implied that these variables were not principal objectives of the Clusters Approach to Career Orientation class. It was also believed that several intervening factors external to the CACO class could have served as a counter-influence on students' self-esteem enhancement and locus of control (independent/responsible behavior). It was recommended, however, that further investigation of this study be conducted, involving other and larger populations in different geographic settings, and including a longer period of time between pre and posttesting.