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A STUDY OF THE RELATIONSHIPS BETWEEN THE PSYCHOLOGICAL VARIABLES OF SELF-CONCEPT, SELF-ACCEPTANCE AND LOCUS OF CONTROL IN CHILDREN AND ADOLESCENTS

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A STUDY OF THE RELATIONSHIPS BETWEEN THE PSYCHOLOGICAL VARIABLES OF SELF-CONCEPT, SELF-ACCEPTANCE AND LOCUS OF CONTROL IN CHILDREN AND ADOLESCENTS

By

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ABSTRACT

A STUDY OF THE RELATIONSHIPS BETWEEN THE PSYCHOLOGICAL VARIABLES OF SELF-CONCEPT, SELF-ACCEPTANCE AND LOCUS OF CONTROL IN CHILDREN AND ADOLESCENTS

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The purpose of the study was to explore the relationships between the variables of self-concept, self-acceptance and locus of control in children and adolescents in grades 3 through 8. Subjects were 134 students from a midwestern urban school system. The Piers-Harris Children's Self-Concept Scale, the Bledsoe Self-Concept Scale (self-acceptance) and the Nowicki-Strickland Locus of Control Scale were administered to the students. Correlational techniques, analysis of variance and multiple regression were used to analyze the date. The following results were obtained:

1. A positive correlation was found between self-acceptance (Bledsoe) and internal locus of control (Nowicki-Strickland) scores ($r=.27$; $p<.01$).

2. A positive correlation was found between self-concept (Piers-Harris) and internal locus of control (Nowicki-Strickland) scores ($r=.38$; $p<.01$).

3. A positive correlation was found between self-concept (Piers-Harris) and self-acceptance (Bledsoe) scores ($r=.55$; $p<.01$).

4. A positive correlation was found between grade level and internal locus of control (Nowicki-Strickland) scores ($F=5.58$; $df=5, 128$; $p<.01$).

5. A relationship was not found between grade level and self-acceptance (Bledsoe) scores ($F=1.99$; $df=5, 128$; $p>.01$).

6. A relationship was not found between grade level and self-concept (Piers-Harris) scores ($F=2.92$; $df=5, 128$; $p>.01$).

7. A relationship was not found between sex of subject and locus of control (Nowicki-Strickland) scores ($F= 0.12$; $df=1, 128$; $p>.01$).

8. A relationship was not found between sex of subject and self-acceptance (Bledsoe) scores ($F=0.75$; $df=1, 128$; $p .01$). $p>.01$).

9. A relationship was not found between sex of subject and self-concept (Piers-Harris) scores ($F=1.72$; $df=1, 128$; $p>.01$).

The correlations between locus of control and both self-concept and self-acceptance were significantly higher for the males and middle school subjects than for females and elementary school students. For all subgroupings of the subjects (i.e. by sex and grade) significant correlations were found between self-concept and self-acceptance. No statistically significant sex by grade level interactions were found for any of the dependent variables.

Locus of control and self-acceptance were regressed on self-concept. Beta weights of .48 and .25 were found for self-acceptance and locus of control respectively. Their R^2 values increased from .30 (self-acceptance alone) to .36 (when locus of control was added). That is, the

combination of self-acceptance and locus of control accounted for approximately 36% of the total variance in self-concept.

The positive relationships between self-concept, self-acceptance and locus of control were discussed within a global "competency" framework. Conceptual similarities and differences were used to account for the varying degrees to which the factors overlap. Age and sex role expectations were suggested as contributing to the relatively higher correlations among the variables for males and middle school students than for females and elementary school students. The shift toward more internal locus of control scores as the students progressed through the various grade levels was attributed to (1) changes in legal and moral expectations, (2) physical maturation and (3) increased exposure to situations they control. It was recommended that future research be designed to explore the causal aspects of the variables.

To Sue

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CHAPTER I

INTRODUCTION

I recently had the opportunity to conduct a psychological evaluation of a 14 year-old junior high school student whom I shall refer to as Lisa. Lisa had a history of appearing lethargic and helpless. Her intelligence scale scores fell within the average classification range. But, her school grades were mostly Ds and Es and her performance on an achievement test suggested a lag of about three years between her grade placement and her level of functioning. There was no evidence of neurological impairment. Projective techniques and informal measures suggested that Lisa had a negative self-concept and a low level of self-acceptance.

When confronted about the discrepancy between her apparent intellectual ability and her academic performance, Lisa tended to blame forces outside of her control. She attributed responsibility for her performance to such factors as "bad genes", her astrological sign, illness, significant others, and luck. She perceived students who did well as being "lucky" or "teacher's pets." Lisa made no effort

to change because she saw little relationship between her actions and the consequences. She viewed her life as being determined by forces over which she had no influence. Perceptions such as Lisa's are referred to as external locus of control orientations.

The phenomenon of locus of control pertains to one's perceptions of where the command of the cause-effect contingencies in that person's life lie. If the individual's self-perception is that of being in command of contingencies, that person is said to have an internal locus of control. If the command is seen as lying outside of that person, as it was with Lisa, such a locus of control orientation is said to be external. It is not unusual to find that students with low self-acceptance or with external loci of control tend to be the same ones who do not perform well academically.

The Problem

Interest in how people perceive and express themselves is not new. Two eminent psychologists (Carl Rogers in 1947 and E.R. Hilgard in 1949) made self-concept the topics of their presidential addresses to the American Psychological Association. Prominent educators have listed self-concept development as a primary goal of education (Stenner & Katzenmeyer, 1976). It has been evident by the continued large number of

theoretical and research writings published pertaining to self-concept and related notions that interest in self-concept has remained high.

Locus of control has been studied with increasing frequency since it was operationally defined by Rotter (1954). Attempts have been made to determine whether locus of control is correlated with almost every imaginable variable, including some related to self-concept. The research reviewed for Chapter II suggested that the relationship between self-concept, self-acceptance and locus of control is more complex than many researchers apparently have believed. The results of their studies have been neither consistent nor conclusive. So, in general, the problem is that of further extending research aimed at clarifying the relationship between self-concept, self-acceptance and locus of control.

Need for the Study

The relationship between self-concept, self-acceptance and locus of control in children and adolescents is of interest to both educators and psychologists. As will be seen in the review of literature, self-concept and locus of control have been shown to be associated with academic performance and various psychological factors such as happiness and competence. There is a need to better understand

such associations. Such understanding is of potential theoretical and practical value to educators and psychologists.

Purpose of the Study

The purpose of this study is to empirically ascertain the relationship between self-concept, self-acceptance and locus of control. Previous researchers have focused on the general notion of self-concept as a variable to be examined along with locus of control. The hypothesis was that positive self-concept (or high self-esteem) would be correlated with an internal locus of control. On the surface, such a hypothesis seemed tenable. But the research failed to determinatively prove or disprove that hypothesis. Yet, it seems safe to assume that at least one factor pertaining to self-concept must be related to locus of control orientation. This assumption is based on the similarity of characteristics which have been found to be correlated with both self-concept and locus of control. Some factor probably accounts for the commonality of these relationships. One logical choice for such a factor would seem to be self-acceptance. More specifically, it seems reasonable to suggest that those people who find their self-perceptions to be most acceptable would tend to be the same ones who have internal locus

of control orientations. The major hypothesis is aimed at testing that notion. Subsidiary hypotheses dealing with meaningful interactions between self-concept, self-acceptance, locus of control, grade placement, and sex of subject should also be investigated.

Research Hypotheses

The objective of this study is to test the following ten research hypotheses:

Major Hypothesis

1. There is a relationship between self-acceptance and locus of control.

Subsidiary Hypotheses

2. There is a relationship between self-concept and locus of control.
3. There is a relationship between self-concept and self-acceptance.
4. There is a relationship between school grade level and locus of control.
5. There is a relationship between school grade level and self-acceptance.
6. There is a relationship between school grade level and self-concept.
7. There is a relationship between sex of subject and locus of control.
8. There is a relationship between sex of subject and self-acceptance.
9. There is a relationship between sex of subject and self-concept.
10. There will be interrelationships between combinations of the following variables: locus of control, self-acceptance, self-concept, grade level, and sex of subject.

Hypothesis 1 is "major" in that it was interest in the interaction between self-acceptance and locus of control that originally stimulated the proposal. As will be seen in Chapter II, a review of the literature revealed no evidence of research having been done to investigate the relationship between self-acceptance and locus of control for children and adolescents. Yet, some evidence--often conflicting or inconclusive--exists pertaining to Hypotheses 2 through 9. Hypothesis 10 was included to test for more complex, multiple relationships between the variables. The hypotheses will be discussed in more operational terms in the methodology section (Chapter III).

Theoretical Orientations

Two considerations pertaining to self-concept and locus of control must be taken into account in order to rationalize the need, purpose and hypotheses of this study. First, the historical development of theory regarding both self-concept (along with self-acceptance) and locus of control should be recalled in order to provide a general background against which the study can be viewed. Second, the relevant research literature should be reviewed to give ther reader a perception of the present "state of the art." The elaboration of theory takes place here in Chapter I, whereas the review of literature takes place in

Chapter II. Definitional concerns as they have been presented in the literature pertaining to self-concept and locus of control will also be covered in Chapter II.

Development of Self-concept and Self-acceptance Theory

It remains an impossibility to document the onset of self-concept theory. Diggory, who has written a comprehensive review of the history of self-concept theory, traced the written history back to Homer (10th century B.C.) who mentioned such notions as "soul," "spirit," and "psyche" (Diggory, 1966, p. 1). In his review of "senses and intellect" Baldwin (1889) credits St. Augustine (354-430 A.D.) as a pioneer in the investigation of the "self."

The 16th century philosopher Descartes stated that man's quest for truth must begin with doubt of all things. The existence of one's self was the primary concern of Descartes when he made his famous proclamation "I think, therefore I am" (Diggory, 1966, p. 3). This notion formed the basis of the 17th century mind/body controversy. Leibnitz added a third dimension, God, to this controversy. Spinoza perceived the mind/body distinction as being nonessential. Spinoza viewed the mind and body as being essentially the same entity. David Hume, on the other hand, emphasized the role of one's perceptions in realizing the concept of self.

"I never can catch myself without a perception, and never can observe anything but the perception. When my perceptions are removed for any time, as by sound sleep, so long am I insensible of myself, and may truly be said not to exist." (Hume, 1739 in Diggory, 1966, p. 7). James Mill and his son, John Stuart Mill, carried this notion even further. They acknowledged the importance of perception and added to it the notion of memory as a salient aspect of self or ego (Mill, J., 1829 & Mill, J.S., 1865). In this sense, self became an identity through time.

William James (1890) also conceptualized self as being a combination of perceptions and memories. James saw these perceptions and memories as interacting to become "streams of consciousness." For James, a man's empirical self was

> . . . the sum total of all that he CAN call his, not only his body and his psychic powers, but his clothes and his house, his wife and children, his ancestors and friends, his reputation and works, his lands and horses, and yacht and bank account. All these things give him the same emotions. If they wax and prosper, he feels triumphant; if they dwindle and die away, he feels cast down,-- not necessarily in the same degree for each thing, but in much the same way for all. (James, 1950, Vol. I, pp. 291-92)

James envisioned various components of the empirical self including the spiritual, material, social, and bodily selves (Reisman, 1966, pp. 23-24). The spiritual

self is how we perceive our being. As Diggory put it, the spiritual self is "the active principle in consciousness, the center around which all other aspects of it cluster; it is the source of interest, effort, attention, will, and choice" (Diggory, 1966, p. 15). The material self is represented by the "lands and horses, and yacht and bank account" mentioned above. The social self springs more from one's "wife and children, his ancestors and friends." The social self is seen as being an influence in those situations where praise and recognition are sought. The bodily self becomes most salient during adulthood when it gains status through clothing and ornamentation.

James' major contribution to the field of self-concept theory has generally been thought to be his description of the various components of self, as described above. Of relevance to the proposed study is James' writings pertaining to self-esteem. Two factors, success and pretensions, interact to determine one's level of self-esteem. Success can occur in areas of importance to any of the self-concept components. James' "Law" states that:

$$\text{Self-esteem} = \frac{\text{Success}}{\text{Pretensions.}}$$

To increase success experiences results in increased self-esteem. Pretensions are areas within the various

components in which the individual perceives having some potential or probability of success. To decrease pretensions results in increased self-esteem. Pretensions can be decreased by either gratifying them to giving them up. So, James suggested that to either have increased success experiences or to gratify or otherwise decrease pretensions will result in enhanced self-esteem (James, 1890, pp. 315-30).

Despite differences in their backgrounds, the "self" of which James wrote bears similarities to Freud's concept of ego. Freud, too, viewed the notions of perception and memory as being salient factors in the development of one's self. The ego was seen, especially in Freud's earliest writings, as being a perceptual-conscious mechanism which engaged in dynamic interaction with the id and superego (Diggory, 1966, pp. 29-31). The ego was conceived as functioning as a sort of reality-oriented buffer which moderated the id's libidinal impluses and the superego's socio-cultural moral inhibitions.

Three conceptualizations brought forth by Jung's "psyche" have had a siginificant impact on the development of self-concept theory: the shadow, the persona, and the mana-personality (Diggory, 1966, pp. 35-37). While the anima and animus represent projections on to the opposite sex, the shadow

represents one's relationships with the same sex. The shadow contains man's deep rooted and potentially dangerous evolutionary history. Supression of the shadow results in decreased creativity and increased conformity. The persona is an archetype which Jung related to conformity. The persona mask allows individuals to relate in an adaptive manner to both friends and enemies (Hall & Nordby, 1973, pp. 40-53). Jung distinguished mana-personality from persona in that mana-personality is a special case of persona which involves an especially powerful role (Diggory, 1966, pp. 35-36). Exploration of the unconscious is a tremulous process in that it involves confrontation with the fearful shadow. That archetype which serves as the organizing principle of the personality is what Jung referred to as the self. It is the major archetype of the unconscious. The ego, on the other hand, was seen by Jung as being conscious (Hall & Nordby, 1973, pp. 51-53). The process by which one's unique self becomes realized was referred to as "individuation" (Jung, 1956, p. 182).

C.H. Cooley viewed individuals' selves as being formed by reflections from interpersonal relations. He referred to this reflective self-evaluation as "the looking-glass self" (Cooley, 1902, pp. 20-21). Calhoun and Morse (1977) described Cooley's "self"

as being the most widely accepted and used definition. stating further that, ". . . we perceive ourselves as reflected in a mirror; therefore, we tend to be interested in our appearances because they are ours, pleasing or otherwise" (Calhoun & Morse, 1977, p. 318). Cooley saw one's looking-glass self as serving the function of social role determination through competition. That is, the roles a person has adapted depend on how that person has perceived his or her relative ability to compete with others according to the characteristics demanded by those roles (Cooley, 1899).

George Mead also placed much importance on social influences in his self-concept theory. Mead referred to himself as being a "social behaviorist" (Mead, 1934). He was influenced by two forces, pragmatism and functionalism (Diggory, 1966, p. 44). Hamachek described Mead's socially formed self as being, ". . . an <u>object of awareness</u>, rather than a system of process. That is, we come to know ourselves and respond to ourselves as we see others responding to us. Mead's self is a socially formed self which grows in a <u>social</u> setting where there is <u>social</u> communication (Hamachek's italics, 1977, p. 55). For Mead, feelings of inferiority grow out of subjective wants which have gone unsatisfied (Mead, 1934).

Phenomenalism has presented a doctrine of self in which awareness of direct appearances or perceptions are seen as the building blocks of one's self. Snygg and Combs (1949) and Combs, Richards and Richards (1976) have been proponents of the phenomenological approach of studying self-concept. The self-concept is a somewhat organized perception used for self-understanding, especially during times of choice. The self-concept serves as an economical method by which a person can reduce his vast phenomenal field to functional terms (Combs, Richards & Richards, 1976, p. 161).

Carl Rogers listed the phenomenal field--along with the self and the organism--as being of primary importance in his self-theory (Hamachek, 1978, p. 59). As a matter of fact, it was a graduate student of Rogers, Raimy in 1934, who is credited with coining the term "self-concept" (Calhoun & Morse, 1977). For Rogers one's self-concept is

> the organized, consistent conceptual gestalt composed of perceptions of the characteristics of the "I" or "me" and the perceptions of the relationships of the "I" or "me" to others and to various aspects of life, together with the values attached to these perceptions.
> (Rogers, 1959, p. 200)

Of relevance to the notion of self-acceptance had been Rogers' theoretical and empirical work with the

ideal self (Rogers & Dymond, 1954). A state of congruence between one's organism and self is said to exist, "When the symbolized experiences that constitute the self faithfully mirror the experiences of the organism . . ." (Hall & Lindzey, 1970, p. 530). Speaking further on Roger's conception of congruence-incongruence Hall and Lindzey said that, "If the discrepancy between self and ideal-self is large, the person is dissatisfied and maladjusted" (Hall & Lindzey, 1970, p. 530). As will be seen in the review of literature (Chapter II), this dissatisfaction and maladjustment is a common denominator for both a lack of self-acceptance and external locus of control.

As has been suggested, a number of reviews of the faults and ambiguities of self-concept theory are available (Hilgard, 1949; Hall & Lindzey, 1970; and Wylie, 1974). Wright listed five points of disagreement and ambiguity:

> First, is the self ubiguitous, or is it relatively circumscribed in its effects? Second, is the self an active entity of dynamic process or is it an essentically passive object of knowledge and reflection on the part of the behaving person? Third, is the self so unitary that a given "self" may be considered operative in any and all circumstances or is the self so multifaceted that it is necessary to think of different "selves" as operative

> at different times depending upon specific circumstances? Fourth, is the self internally consistent and highly integrated with respect to its various components or is the question of internal consistency inconsequencial? Fifth, is the self cognitively prominent or clearly articulated by the person or does the self affect behavior implicity or indirectly?
> (Wright, 1977, pp. 423-24)

Wright evaluated these points in light of the available research and theory. Where faults and ambiguity still existed, Wright suggested research aimed at empirical verification. The current trend seems to be away from negative perceptions of self-concept theory and toward efforts of correcting the faults and clearing up the ambiguities. The writings of Epstein (1973), Wells and Marwell (1976), Calhoun and Morse (1977), Dickstein (1977), and Wright (1977) have been more remedial.

Epstein (1973) suggested that "self-theory" better describes the notion than does self-concept. He attempted to show that one's perceptions of self fit within the classification of theory to the extent that the individual sees it as being "extensive, parsimonious, empirically valid, internally consistent, testable, and useful" (Epstein, 1973, p. 408). Although Epstein's treatment of "theory" is not as rigorous as might be desired, it does reflect the trend toward a more universally acceptable

definition of self. Epstein strived for a conceptualization which would be acceptable for those persons whose views ranged from phenomenological to behavioristic.

One of the more positive perceptions of the present state of self-concept theory has been that offered by Dickstein (1977). She suggested that one's concept of self develops through stages or levels and that different theories are most appropriate for certain levels. For example, the writings of Freud, White, Erickson (autonomy), Bowlby, and Ainsworth could all be applied to the first level, "the dynamic self" (Dickstein, 1977). Dickstein differentiated five levels: self as dynamic; object; knower; integrated whole, and the selfless self. She perceived few people as progressing beyond the second level. In addition to an interesting review of the history of self-concept theory, the Dickstein article reflects the recent trend to reconsider self-concept as a meaningful and viable construct.

Development of Locus of Control Theory

While the origins of the theoretical foundations of self-concept were ambigious and multi-faceted, the origins of locus of control theory have been relatively easy to trace. Snell (1960)

suggested that it was the Greek dramatists (5th century B.C.) who first viewed man as a creature who controlled his own destiny. It was during the early 1950's that the term "locus of control" was first used.

Lefcourt (1976) has presented an inclusive history of the development of locus of control theory from Rotter's original inception in 1954. As will be seen in the review of literature (Chapter II), the locus of control research and development of new instruments expanded quickly following Rotter's 1954 work. Rotter conceived of locus of control as a product of social learning theory. Considering the deterministic view of man held by social learning theorists, it was ironic that this framework would yield a notion which deals with one's perception of the degree of control that person has over his or her destiny. Rotter later explained locus of control in terms of perceived expectancy:

> In social learning theory, a reinforcement acts to strengthen an expectancy that a particular behavior or event will be followed by the reinforcement in the future. Once an expectancy for such a behavior-reinforcement sequence is built up the failure of the reinforcement to occur will reduce or extinguish the expectancy. As an infant develops and acquires more experience he differentiates events which are causally related to perceding events and those which are not. It follows as a general hypothesis that when the reinforcement is seen as not contingent

> upon the subject's own behavior that its occurrence will not increase an expectancy as much as when it is seen as contingent. Conversely, its nonoccurrence will not reduce any expectancy so much as when it is seen as contingent. It seems likely that, depending upon the individual's history of reinforcement, individuals would differ in the degree to which they attributed reinforcements to their own actions.
>
> (Rotter, 1966, p. 2)

A comprehensive review of the theoretical foundations of locus of control theory as it has evolved from social learning theory has also been developed (Rotter, Chance & Phares, 1972).

Lefcourt (1976, pp. 130-34) was concerned with the issue of generalizability across persons and across reinforcement areas. After reviewing literature which investigated differences between black and white students' responses to locus of control measures, Lefcourt concluded that, "These findings obtained with black students reveal some limitations in the generalizability of control expectancies" (Lefcourt, 1976, p. 131). Generalizability across reinforcement areas also suggested situationally specific generalizability. That is, locus of control seems to have both unidimensional and multidimensional characteristics. Rotter's (Rotter, 1966) scale is usually perceived as being a "generalized" or unidimensional scale, whereas

the Crandalls' Intellectual Achievement Responsibility Questionnaire was designed to assess locus of control as it pertains to academic achievement (Crandall, Katkovsky & Crandall, 1965). Limitations do exist in generalizability across persons and reinforcement areas.

An early theoretical criticism of locus of control was raised by Gurin et al. (1969). Their concern centered on an issue similar to generalizability. There has been a tendency to perceive internality as being more valued than externality for all people. One's history of success experiences may influence this perception. Lefcourt explained it as follows:

> For individuals who are favored with success experiences internal control expectancies could result in a sense of pride, positive affects, and assertive, striving behavior. However, for individuals who are more likely to experience setbacks and failures, an internal locus of control could result in depression, self-denigration, and a surrender of ambition.
>
> (Lefcourt, 1978a, p. 11)

For persons whose life experiences are beyond their control (as with concentration camp prisoners or critically ill patients, for example) an internal locus of control may have a self-destructive nature.

Another problem in the conceptualization of locus of control has to do with what Lefcourt

(1978a, p. 14) referred to as "defensive externality" as opposed to veridical externality. Some people, especially those who are fighting for a cause, objectively believe they will have little influence in determining outcomes and consequently they have scored toward the external pole. Yet, by the nature of their willingness to fight, they have appeared subjectively to see cause-effect contingencies between their actions and outcomes.

The extent to which these theoretical considerations are relevant to different studies varies. Researchers interested in the response patterns of specific groups of people or in specific situations have addressed the issue of generalizability. Most locus of control theorists now recognize the need for such measures for multidimensional use. Continued research, especially in areas related to helplessness, is necessary to determine the relative personal value of internality and externality. More research is indicated aimed at clearing up the complexities regarding "defensive externality." Lefcourt concluded his review of these theoretical issues by stating that:

> Locus of control has proven to be a useful construct in predicting the manner in which persons confront challenges. However, there are limits within which locus of control may function as a variable.

> The reinsertion of the construct into the schema from which it first developed should make it a more powerful and useful variable . . .
>
> (Lefcourt, 1978a, p. 18)

The schema alluded to by Lefcourt was, of course, social learning theory. Rotter (1975) has also addressed these problems and possible misconceptions pertaining to locus of control theory.

Overview of the Dissertation

Chapter I began with the specification of the need, purpose and hypotheses related to the stated problem. The previous discussion had cultivated the notion that self-concept and locus of control theories have produced workable constructs. While the development of self-concept theory has involved a lengthy and varied history, locus of control theory is a relative infant with a more clearly defined theoretical orientation.

Chapter II is a review of the relevant literature pertaining to self-concept, self-acceptance and locus of control. Because of the diversity of definitions available in the research, additional attention is given the manners in which the constructs are used in the research literature. Emphasis is also placed on those studies which have

attempted to examine possible relationships between self-concept, self-acceptance, locus of control, academic performance, and modification of both self-concept and locus of control.

Chapter III includes a description of the methodology used to assess the relationships between self-concept, self-acceptance and locus of control. Specifically, the sample, instrumentation, operational definitions, testable hypotheses, design of the study and the method of data analysis are described.

Chapter IV is devoted to reporting the results of the study and to present the findings in tabular and descriptive forms. Evidence either supporting or rejecting each of the hypotheses is provided.

Chapter V is used to synthesize the study and to report on conclusions which may be drawn. In addition to summarizing the implications of the earlier chapters, this chapter is used to suggest recommendations for future research in the areas of self-concept, self-acceptance and locus of control.

CHAPTER II

A REVIEW OF THE LITERATURE

The objectives of this review are to describe the literature relevant to: (1) self-concept and self-acceptance, (2) locus of control, (3) interactions between self-concept, self-acceptance, and locus of control, (4) age and sex differences, and (5) research considerations.

Introduction

Certain theoretical and empirical evidence should exist in the literature in order to rationalize this study. First, the literature should yield writings which establish self-concept as a meaningful construct. There should be concern shown for the recent manners in which self-concept, self-acceptance and related terms have been defined. In order to enhance the practical applicability of the proposed study, the possibility of a relationship between self-concept and academic performance should be investigated. Also of significant value would be studies which provide confirmation that modification of self-concept is possible.

Second, concerns--similar to those mentioned regarding self-concept literature--should be shown for the literature pertaining to locus of control. That is, locus of control should be shown to be a meaningful construct. While literature pertaining to self-concept is generally well known, the same is not true for the locus of control literature. Locus of control is a relatively new construct. Consequently, most of the relevant research has appeared in the past two decades. Of particular importance are studies relating locus of control to academic performance and research which deals with attempts to modify locus of control. Again, the usefulness of the proposed study is contingent upon previously established evidence of the possibility of relationships to academic competency and change in locus of control.

The third area covered involves literature pertaining to relationships between self-concept, self-acceptance and locus of control. Both self-concept and locus of control have been shown to have affiliations with academic performance, personality characteristics and variety of other attributes. This mutual affiliation has led to investigations of possible interrelationships between self-concept and locus of control. Most such studies have attempted

to find a positive correlation between high self-concept and internal locus of control. Others have dealt with self-acceptance and locus of control.

Self-concept and Self-acceptance

Self-concept

A variety of books pertaining to self-concept have been written in the last three decades. Some texts, such as Combs and Snygg (1959) and Combs, Richards and Richards (1976) have approached the study of self-concept from a phenomenological viewpoint. Berne (1964) provided a transactional analysis prospect. Coopersmith (1967) examined some antecedents of self-esteem. Wylie (1974) discussed methological and measurement considerations. Hamachek (1978) provided a broad, inclusive overview of self-concept theory and research.

The complexity of the problems associated with research related to self-concept first becomes evident when reviewing the diversity of definitions for self-concept and related facets of self-concept. Shavelson et al. reported finding at least seventeen different conceptual definitions of self-concept in the literature (Shavelson, Hubner & Stanton, 1976). Hall and Lindzey suggested that "one could wish that it were possible to establish by fiat standardized

definitions on the self and ego and make it illegal to use them in any other way" (Hall & Lindzey, 1970, p. 523).

Jersild (1952), in his research with over three thousand children and adolescents, defined the self as follows:

> When we speak of the self we mean among other things, a system of ideas, attitudes, appraisals, and commitments pertaining to one's own person. The person experiences these as distinctly belonging to him and all of them together constitute the person's awareness of his individual existence and his conception of who and what he is. These attitudes and ideas are, of course, influenced by learning.
>
> (Jersild, 1952, p. 146)

Coopersmith offered a similar definition when he referred to self-esteem as "a personal judgement of worthiness that is expressed in the attitudes the individual holds toward himself. It is a subjective experience which the individual conveys to others by verbal reports and other overt expressive behavior" (Coopersmith, 1967, p. 6).

Viewing the self from a phenomenological prospect Combs et al. stated that:

> These perceptions do not exist in the perceptual field as a simple enumeration of ways of seeing the self. Rather, the concepts of self constitute an organization representing a person's own conception of himself in all his complexity. This organization is not a mere conglomeration

> of isolated concepts of selfs, but a patterned interrelationship or Gestalt of all self-perceptions.
>
> (Combs, Richards & Richards, 1976, p. 159)

The phenomenal self shifts according to the given situation or perceptual field. Not all concepts of self are constantly of equal importance. As one's needs, wishes, and desires change, so does that person's concepts of self for a particular perceptual field.

Calhoun and Morse (1977) followed the history of "self" in an attempt to determine more universal definitions of self and related notions. They recommended adoption of the James' definition of self as "the sum total of all one can call his." Self-concept was referred to as "the substantive description which one employs to identify his nature." And, self-esteem was related to as "one's satisfaction with his self-concept" (Calhoun & Morse, 1977, p.318). The authors concluded by recommending that certain self-assessment instruments be recognized as valid measures of self-concept and self-esteem and that the practice of developing instruments for each new study be abandoned.

The terms self-concept and self-esteem have also often been used interchangeably. Hamachek perceived them as separate entities, "Self-concept refers to that particular cluster of ideas and

attitudes we have about our awareness at any given moment in time. Or . . . the organized cognitive structure derived from experiences of our self" (Hamachek, 1978, p. 3). On the other hand, "Our self-esteem . . . refers quite literally to the extent to which we admire or value the self" (Hamachek, 1978, p. 3). Self-concept is the cognitive aspect of the self; self-esteem is the affective or feeling aspect of the self.

Self-acceptance

Just as the terms self-concept and self-esteem have often been used interchangeably so have the terms self-concept, self-acceptance, self-regard, and self-esteem. Wylie (1974) addressed herself to this issue when she said,

> The most commonly studied class of aspects of the phemonenal self includes such attitudes as self-satisfaction, self-acceptance, self-esteem, self-favorability, congruence between self and ideal self, and discrepancies between self and ideal self. All these terms are not synonymous, even in the literary sense. For some authors, self-acceptance means respecting oneself, including one's admitted faults, while self-esteem or congruence between self and ideal self means being proud of oneself or evaluating one's attributes highly. In fact, to some theorists, optimum self-esteem or self-satisfaction is manifested by moderately small (rather than by small or zero) discrepancies between S's descriptions of self and ideal self on Q sorts, rating scales, or adjective check lists. That is, self-acceptance is presumed by some to be the conscious (realistic) recognition of some falling short of the ideal.

> If these terms had more clearly differentiated literary meanings and correspondingly differentiated operational definitions, it would be desirable to organize the discussion of the instruments according to the construct involved (e.g., self-esteem as contrasted to self-acceptance). However, the terms are so intertwined and overlapping in the literature that the constructs must be discussed as a group.
> (Wylie, 1974, p. 127)

Wylie stated her preference for the generic term self-regard to include self-acceptance, self-esteem and degree of congruence or discrepancy between self and ideal self.

As early as 1952 Jersild recognized the need for educational concern in the area of self-acceptance:

> There is a need of staggering magnitude for doing something in our educational program to help children and youth acquire realistic attitudes of self-acceptance.
> (Jersild, 1952, p. 9)

Bills (1955) studied the relationships between self-acceptance and a variety of school behaviors. He summarized:

> Preliminary findings indicate that people who are high in acceptance of self compared to those who are low in acceptance of self have a higher group status, are more responsible, are more efficient intellectually, are more dominant, participate more in social events, have fewer psychosomatic complaints, have less anxiety, have fewer contacts with student-affairs counselors, have a higher general psychological adjustment, are better prepared for college work, make higher scores on achievement tests and are more proficient in English mechanics.
> (Bills, 1955, p. 18)

Block and Thomas (1955) found the relationship between self-acceptance and psychological adjustment to be more complicated. That is, maladjustment has been found to be more common for people with very high and very low self-acceptance scores.

Perhaps the most complete review of research in the area of self-acceptance has been that of McCandless. In general, McCandless concluded that people who are self-accepting are better adjusted psychologically, more secure, less anxious, and less depressed (McCandless, 1967, p. 280). Of relevance to the proposed study was the inference by McCandless that self-acceptance and positive self-concept may be related (McCandless, 1967, p. 280). Silber and Tippett (1965) studied self-acceptance (real-ideal discrepancies) in adolescents from a psychodynamic framework. In general, more positive components have been found to be related to self-acceptance.

Hamachek (1978) defined self-acceptance as the degree of congruence between a person's real and ideal self-concepts. That is, the greater the similarity between how one perceived oneself and how that person would like to be self-perceived, the greater the extent of self-acceptance. Hamachek suggested that discrepancy be reserved to imply the difference score which describes the amount of incongruence (Hamachek, 1978, p. 249).

Norem-Hebeisen (1976) viewed self-acceptance as a multidimensional construct. Four distinguishable self-concept dimensions related to self-acceptance were found to cluster: basic acceptance, conditional acceptance, real-ideal congruence, and self-evaluation. Basic acceptance originates during early childhood and is defined as "a perverbal emotional acceptance or rejection that is developed before an individual has developed a conceptualization of self" (Norem-Hebeisen, 1976, p. 559). Conditional acceptance is dependent on meeting personal standards and the standards of others. Real-ideal congruence was based on Hamachek's self-acceptance definition (above). Self-evaluation is one's own judgement of how he or she compares with others. Norem-Hebeisen hypothesized and found additional factors within the four dimensions for adolscents. He stated further that Brookover and Erickson (1975) are in the process of developing scales to measure each dimension.

Self-concept and Academic Performance

It is logically consistent to assume that a person's self-concept would somehow be related to that person's academic performance. Perhaps the most inclusive writing on this topic was that of Purkey (1970). If a student perceives himself as a potential failure, chances are greater that he

will fulfill that prophecy. Or, as Hamachek concluded: ". . . self-concept theory strongly suggests that we will 'act like' the sort of person we perceive ourselves to be. As we encounter new experiences in everyday living, we tend to accept or reject them in terms of their compatibility with our present concept or self" (Hamachek, 1978, p. 74). Correspondingly, failure experiences have been related to unhealthy self-image development (Hamachek, 1977).

The relationship between self-concept development and academic competency raises the issue of causal influence. That is, since a vast majority of studies show a correlational relationship--rather than an experimental relationship--between the variables, it is not possible to infer whether one causes the other (Wood, 1974, pp. 40-42). Hamachek suggested a reasonable explanation for this "chicken or the egg" problem when he wrote, "even though it is not possible to specify exactly which came first, good school work or high self-regard, it does not seem unreasonable to suggest that each is mutually reinforcing to the other to the extent that a positive change in one facilitates a positive change in the other" (1978, p. 200, Hamachek's italics). Based on their study of over one thousand students, Brookover et al. observed that, ". . . self-concept of ability is only a necessary, but not sufficient condition for achievement" (Brookover,

LaPere, Hamachek & Erickson, 1965). Self-concept and academic achievement go hand in hand, each seems to feed to some extent on the other. A review of studies designed to further explore the relationships may help clarify their association.

Earlier studies such as Wattenberg and Clifford (1964) and Lamy (1965) found self-concept measures to be at least as good or better predictors of later reading achievement than were intelligence test scores. Dyson (1967) found a positive relationship between school performance and self-concept in his study on ability grouping and self-concept. Lee (1972) came to a similar conclusion following his study of program evaluation. In a like manner, Jones and Grieneeke (1970) found self-perception to be an accurate predictor of scholastic achievement. These studies are predictive or correlational in nature and do not prove a cause-effect relationship.

In a more recent study, Robert Green reported that "concern for improving black self-concept stems from the notion that the self-concept is believed to be the best single predictor of achievement for black students" (Green, 1974). Marx and Winne (1975) using the Stanford Achievement Test (SAT) and the Sears Self-Concept Inventory (with social and academic subtests) involved 98 fifth and sixth grade students. In light of their

contradictory results, this study merits additional examination. The sample was from a school which served predominantly black, low SES children. The researchers found that: (1) verbal and quantitative scores from the SAT were correlated, (2) no relationship was found between SAT scores and academic self-concept and (3) SAT scores were negatively correlated with social self-concept. Two explanations are offered. First, perhaps academically successful students in this sample are rejected by peers. Second, highly socially regarded students may reject academic success. Efforts to examine differences between races were not reported.

Children with learning difficulties have tended to have less adaptive self-concepts than do other children (Sears, 1970; Trowbridge & Trowbridge, 1972; and Kifer, 1975). As suggested previously, reading achievement has been connected with self-concept (Henderson, Long & Ziller, 1965; Herbert, 1968; and Williams, 1973). Greene and Zirkel (1971) found self-concept to be associated with verbal skills in both English and Spanish languages for Puerto Rican subjects.

Other studies have focused on additional factors related to academic performance. Studies by Katz have sought to investigate the relationships between achievement and self-perceptions (Katz, 1967 and

Katz, Cole & Baron, 1976). For black elementary school children a relationship between lack of academic success and realistic self-criticism was found to exist for academically unsuccessful boys but not academically successful boys. No differences were detected between successful and unsuccessful girls. Apparently the unsuccessful boys placed more valence on academic failure than did the successful boys. Katz interpreted this self-criticism as an attempt to reduce anticipatory anxiety. That is, the unsuccessful boys have internalized the expectation that they will not do well, and they prefer to point out their errors rather than have others criticize them.

Felker has been involved in studies which have implications for self-concept, academic achievement and locus of control. Felker and Bahlke (1970) and Stanwyck and Felker (1971) reported that middle class children with high self-esteem attributed responsibility for their achievements to their own actions, whereas children with low self-esteem accepted less responsibility and showed increased anxiety. Felker and Thomas (1971) found that high self-esteem students reported that they made a greater number of positive self-initiated verbal statements while performing academic tasks than did low self-esteem students.

Purkey, Graves and Zellner (1970) looked for differences in self-concept scores according to whether subjects attended an "experimental" or traditional school. The experimental school was ungraded. Self-concept scores, as measured by the Coopersmith Self-Esteem Inventory, showed an interaction between age and school. Self-concept for the students in the experimental school remained constant across age wereas self-concept for the students in the traditional schoo decreased across age. Combs and Soper (1963) had found similar results in their study of the relationship between children's perceptions and academic achievement.

Brookover and Erickson (1975) have reviewed the literature and offered their formulations pertaining to self-concept of academic abilities. Special emphasis was placed on the influence of others in the development of one's academic self-concept.

Despite the number of studies which have found correlational relationships between self-concept and academic achievement, no research has been reported showing a direct causal relationship. That was the point of Scheirer and Kraut when they concluded that:

> . . . the overwhelmingly negative evidence reviewed here for a causal connection between self-concept and academic achievement should create caution among both educators and theorists who have heretofore assumed that enhancing a person's feelings about himself would lead to academic achievement (Scheirer & Kraut, 1979, p. 145).

Modification of Self-concept

One formula for writing a successful best seller during the 1970's has been to prescribe methods of self-analysis or self-concept modification. It comes as no surprise that since self-concept is perceived as being so relevant to a life of happiness and competence, people are interested in ways to change self-concept. It has long been suggested by some that the school setting offers an appropriate milieu for self-concept change (Ojemann et al., 1955 and Bower, 1961). Kipfer (1961) recommended a teacher training prospectus. Cowen and his associates (1963) suggested a massive preventive mental health program for school settings. Coopersmith (1965) discussed the need and methods for enhancing self-concept in the classroom. The DUSO (Developing Understanding of Self and Others) guidance program has been found to influence the self-concepts of primary school children (Koval & Hales, 1972). Schulman et al. (1973) described a successful teacher-taught classroom program to enhance self-concept.

Felker (1974) has done extensive research and writing on methods of building positive self-concepts in preschool, elementary and high schools. He lists five "keys" of self-concept enhancement:

1. Modelling self-praise by caregivers.

2. Help children learn to realistically evaluate themselves.

3. Teach children how to set reasonable goals.

4. Teach children to self-praise.

5. Teach children to praise others.

Felker's principles are based on notions of social learning theory such as reinforcement and imitation. Recent reviews of literature pertaining to self-concept enhancement in the classroom have been presented by Bobson (1973), Hansen and Maynard (1973), Canfield and Wells (1976), Dusek (1977), and Hamachek (1978).

Locus of Control

The notion of locus of control was first formally suggested by Julian Rotter in his 1954 (see Rotter, 1954) writings on social learning theory (Hersch & Scheibe, 1967). The first scale to measure locus of control was a part of a doctoral dissertation by Phares (1955). This scale was later revised by James (1957). Rotter developed his often used scale in 1962 and published it in 1966 (Rotter, 1971). The heuristic value of the scale has been immense. Research relating locus of control to personality characteristics and other personal attributes has "rapidly mushroomed beyond its originator's most vivid expectations" (Lefcourt, 1976, p. 35).

Greater consistency has existed between the definitions used by various writers on the topic of locus of control than for self-concept. Rotter aquainted many readers to the concept when he introduced his scale in 1966.

> The effect of a reinforcement . . . is not a simple stamping-in process but depends upon whether or not the person perceives a causal relationship between his own behavior and the reward. A perception of causal relationship need not be all or none but can vary in degree. When a reinforcement is perceived by the subject as following some action of his own but not being entirely contingent upon his action, 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 a belief in external control. If the person perceives that the event is contingent upon his own behavior or his own relatively permanent characteristics, we have termed this a belief in internal control.
>
> (Rotter, 1966, p. 1, Rotter's italics)

Rotter's definition applies to generalized or undimensional expectancies of locus of control and is commonly accepted as operational by most researchers and writers on the topic (Gilmor, 1978, for example).

Some of the more recent definitions in the literature (Reid & Ware, 1974, for example) have begun to treat locus of control as a multidimensional concept. Lefcourt--in addition to providing a

summary of multidimensionality--suggested that, ". . . it would seem most apt that investigators devise specifically aimed locus of control measures for theoretically relevant criteria" (Lefcourt, 1976, p. 134). Children's scales such as the Intellectual Achievement Responsibility Questionaire (Crandall, Katkovsky & Crandall, 1965) and the Locus of Responsibility Scale (Bills, 1975) have been attempts to build tests for academically relevant criteria.

The possible presence of confounding elements in the term "control" have not been ignored. Lefcourt elaborated,

> It has been contended by some that the construct was originally misnamed, that control was never the central issue, but rather that contingency was at the core of the construct. The term control connotes successful manipulation. The construct, locus of control, on the other hand, focuses upon the perceived contingency of events, whether they be positive or negative outcomes. (Lefcourt, 1976, p. 154)

So, even though relatively consistent definitions of locus of control have existed in the literature, concerns have been expressed pertaining to the multidimensional aspect and to the inherent meaning of the term control.

Reviews in which the authors have concerned themselves with the general construct of locus of control have included writings by Rotter (1966), Lefcourt (1966 & 1979 in press), Joe (1971), Throop

and MacDonald (1971), and Phares (1976). Reynolds (1976) compiled tabular summaries of correlates of locus of control, implications for education and research criticisms. Most of the studies reviewed by Reynolds used adult samples. A timely review of literature focusing on locus of control and adaptive behavior of children and adolescents has been complied by Gilmor (1978). Gilmor's review covers writings directed at measurement, adaptive behavior, achievement, modification, and antecedents of locus of control.

Most reviewers have found consistent evidence of a positive relationship between valued personality characteristics, academic motivation and internal locus of control. Roueche, Mink and Abott (1971) reviewed studies which reported external locus of control to be positively related to neurosis, escapist behavior, social incompetence, hostility, and below par intellectual ability. Lombardo, Fantasia and Solheim (1975) found research literature which tied externality to poor interpersonal relations, low ego-strength, unfavorable self-descriptions, anxiety, and poor personal adjustment. In general, more desired characteristics have usually been associated with internal locus of control.

Locus of Control and Academic Performance

Common sense dictates that those who believe that they govern the events which determine their destiny would tend to be the same people who do well in academic situations. The literature in the area of locus of control and academic performance has frequently supported this contention. Joe summarized his review by stating that, ". . . the locus of control variable plays a major role in the learning process and the striving for achievement by influencing an individual's strategy preferences in confronting problem-solving and risk-taking situations" (Joe, 1971, p. 635).

The amount of research has increased since the release of the Coleman report. The Coleman report suggested the presence of a relationship between academic outcomes and the belief by nonwhite children that their efforts were a potent force in determining their academic performance (Coleman et al., 1966). Petigrew summarized by saying, "An 'academic self-concept' variable . . . proves more significant for white performance. But a measure of 'fate control' or 'control of the environment'--indicated for example, by disagreeing that 'good luck is more important than hard work for success'--is much more important for Negro performance . . ." (Petigrew, 1967, p. 283).

Handel (1975) also found this tendency among disadvantaged Israeli students.

Crandall, Katkovsky and Crandall (1965) presented an oft cited study of the attribution of intellectual responsibility for students in grades 3-12. Their results indicated that upper-grade girls accepted more responsibility for academic achievement than did upper-grade boys and that moderate evidence existed which suggested that intellectual responsibility was somewhat related to family size, intelligence and social class. In the next two years Virginia Crandall was involved in studies relating control and intellectual academic achievement. In 1967 Katkovsky et al. focused their efforts on the relationship of parental influences and intellectual locus of control (Katkovsky, Crandall & Good, 1967). The parental styles interacted with the sex of the child to influence their children's perceived academic locus of control. That is,

> There appears to be a difference between the sexes in the characteristics of the parent-child relationships which influence the development of internal and external orientations. Boys appear more likely to develop an internal orientation if they experience maternal love and support, while girls are more likely to develop an external orientation if they experience parental rejection and authoritarian control. (Katkovsky, Crandall & Good, 1967, p. 774)

In 1968 Virginia Crandall teamed with Paul McGhee to determine that children who are more internal tend to have higher course grades and score higher on achievement test scores (McGhee & Crandall, 1968).

Nowicki and Strickland made their influence in the area felt when they announced the development of their locus of control scale for children during the early 1970's (Nowicki & Strickland, 1970 & 1973), An example of the early use of the Nowicki-Strickland scale was research carried out by Nowicki and Roundtree (1971). Their results showed that for males there is a relationship between locus of control and achievement, whereas for girls the relationship was between locus of control and extracurricular activities. Strickland (1972) reviewed the relevant literature in locus of control as measured by the Nowicki-Strickland scale and competence in children. Writing on the research to date Strickland said:

> . . . it appears that we have an instrument which is generally not related to traditional intelligence measures nor social desirability but does appear to predict academic achievement particularity for males. Additionally, a belief in internal control for both males and females in most cases, appears to be related to a number of cognitive and competence behaviors which can be described as attempts to master the surrounding environment including utilization of information about immediate past performance, concept solution, delay of gratification,

> persistance at time-consuming and difficult tasks and even compliance to treatment demands that mean the difference between life and death.
>
> (Strickland, 1972, pp. 6-7)

The Nowicki-Strickland scale has remained among the more popular tests of locus of control.

Messer (1972) used the Intellectual Achievement Responsibility Questionnaire (IAR), the Matching Familiar Figures test, school grades, and Stanford Achievement Test scores to check for a relationship between locus of control and academic performance among 78 forth-grade boys and girls. He controlled for intelligence and cognitive impulsivity and found that students with internal locus of control scores tended to have higher grades and achievement test scores than did those students with external locus of control scores. The IAR provides two scores, one for taking credit for successes and another for accepting blame for failures. Messer found, more specifically, that boys who took credit for their successes and girls who accepted blame for their failures were likely to score higher on the measures of academic performance. Messer explained the difference in terms of sex role perceptions. That is, the boys perceived it as acceptable to take credit for successes, whereas the girls shunned this

"masculine" stance and attributed their high performance to avoidance of failure.

Gozali and her associates (1973) also found sex differences in the relationship between locus of control and achievement. They found that college students with internal scores used their time in a more appropriate fashion during test taking situations. The effect was especially marked for the women in the sample.

Another oft cited work has been that reported by Wolk and DuCette (1973). Two studies were conducted to measure the influence of locus of control on achievement-motivation. Only those subjects characterized as internal produced results consistent with predictions based on Atkinson's (1964) theory of achievement-motivation. Wolk and DuCette suggested their results might explain some inconsistencies found in previous achievement-motivation research.

Further evidence of differences between how internal and external locus of control orientations influence cognitive activity was supplied by Wolk and DuCette (1974). They had subjects search a story for typographical errors; then had the subjects try to recall various aspects of the story. Internals outperformed the externals on the measures of intentional learning (typographical error finding) and incidental learning (story recall).

When told to attend to both the intentional and incidental aspects of the story, the discrepancy between the internal and external subjects lessened causing the authors to conclude that, "it appears that the external does not make full use of his attentional system until stimuli are made more salient or prominent" (Wolk & DuCette, 1974, p. 99). Duke and Nowicki (1974) confirmed their theoretical expectation that subjects with an internal locus of control would tend also to display higher levels of academic achievement. Their sample was composed of adults.

Newhouse (1974) investigated reinforcement responsibility as a function of birth order, grade level and sex for 800 students in grades 4, 5 and 6. Using the IAR he found that only-born children tended to assume less responsibility for success than did other children--a fact Newhouse attributed to increased dependence in only-born children. He found that forth-graders assumed more credit for their success than did fifth- and sixth-graders. Girls accepted more blame for their failures than boys through all comparisons. Newhouse did not measure academic performance, so comparisons to studies such as that of Messer (1972) are limited.

Bradley (1974) used two measures of locus of control, the Nowicki-Strickland Scale and the

Locus of Control Inventory for Three Achievement Domains to examine relationships with sex, race, SES, and classroom behavior. For both tests and subtests, whites scored more toward the internal pole than did blacks. Again, females were more internal regarding unsuccessful outcomes than males.

Ollendick and Ollendick (1976) explored locus of control, intelligence and achievement in juvenile delinquents. Contrary to previous studies, the relationship between locus of control and achievement was not found when the effects of intelligence were partialed out. Rotter (1975) had warned against anticipating such relationships in specific situations as those examined by Ollendick and Ollendick. Rotter stated that one

> . . . problem area is that of specificity-generality. This seems to be a particular problem for those people concerned with predicting achievement behavior or performance in achievement situations. There seems to be a persistent effort to obtain highly accurate and reliable predictions of achievement behavior by the use of a generalized expectancy for internal versus external control. This becomes less reasonable the more structured, the more familiar, and the more unambiguous a particular situation is.
>
> (Rotter, 1975, p. 60)

Rotter suggested the need for further research to explore the interplay of generalized expectancies.

Finch and his associates (1976) tested the generalizability of the locus of control-academic achievement relationship by extending the research to include emotionally disturbed children. Their results were congruent with those of the studies they reviewed in showing that emotionally disturbed students who scored toward the internal pole obtained higher achievement scores than those who did not. Remediation programs designed to encourage internal orientations were recommended.

Writers concerned with the implications of locus of control for the academic achievement of black students have expressed dissenting opinions of the interpretations and relevance of the research. Jorgensen (1976) claimed that much research in the area, including the Coleman report, has failed to recognize the complexity of the issue. He cited studies which have suggested that among black populations the capacity to take social action is related to the aspects of locus of control involving Protestant Ethic ideology. One social pattern to which black students have been exposed involves conflicting messages. Jorgensen explains:

> It reflects what I see as a fundamental pattern of conflicting influences on black students--pressures to achieve and to accept responsibility for their personal success or failure combined with frequent messages

> that the curriculum, teachers, western thought, American society, and all aspects of their education are racist.
>
> (Jorgensen, 1976, p. 21)

Guttentag and Klein (1976) attempted to distinguish the dimensions of expectancies (e.g., individual versus system blame and racial militancy) which might be evidenced in minority students. The analysis of the data ". . . demonstrated clearly that expectancies concerning locus of control contributed significantly to the prediction of school achievement" (p. 1108). Differences between racial and non-racial items, individual versus system blame and racial militancy were not found. Reynolds' (1976) contribution to the confusion was stated in his conclusion that, "Research into LC expectancies has not yet suggested any new directions for educational policy, and the I-E Scale is apparently of no utility for purposes of educational selection or prediction" (Reynolds, 1976, p. 250). Reynolds' review of the literature pertaining to educational implications was selectivly biased in the direction of this conclusion.

Milgram and Milgram (1976) studied various personality characteristics including locus of control for 182 gifted and 310 nongifted Israeli children. Self-concept was measured by an adaptation of the Tennessee Self-Concept Scale, locus of control by

an author-developed scale and anxiety by a revised version of Sarason's scale of general and test anxiety. Gifted children showed more positive self-concept, more internal locus of control and lower anxiety. Similar results relating creativity to locus of control were reported by Churchill (1976). Scanlon (1977) examined the locus of control scores for language disabled and nondisabled grade school children. He found developmental trends (external to internal) for both groups and discovered that the language disabled students were delayed in such trends. Viewing knowledge of laws as a necessary social competency, Gardner, Warren and Gardner (1977) investigated the relationship between law knowledge and locus of control among normal, retarded and learning disabled adolescents. Normal students showed greater knowledge of laws and more internal locus of control than did the retarded or learning disabled students and, for the total group, a link existed between internal locus of control and law knowledge.

Hohmuth and Howe (1977) followed-up an earlier study by Hohmuth and Ramos (1973) concerning disadvantaged college students. The original study showed a relationship between internality and college success. Interestingly, the follow-up revealed that, "Students faced with initial failure

were much more likely to improve in their next semester if their perceived locus of control was internal, but they were ultimately more likely to drop out of college" (Hohmuth & Howe, 1977, p. 486). The authors interpreted this tendency as being a result of internally oriented students as being those most likely to pursue non-academic alternatives when faced with continuing marginal performance.

Bradley and Teeter (1977) turned their attention toward student behavior and perceptions of control over social outcomes. The authors noted that prior studies had established a relationship between academics and locus of control, but previous attempts at confirmation of a locus of control and student behavior relationship were only moderately convincing. Their results supported the contention of a locus of control and academic achievement affiliation and, furthermore, it was found that externals manifested more classroom hostility than internals. This tendency was supposedly due to increased feelings of helplessness and frustration. Considerate behavior was related to teacher conduct: "The present results indicate that hostility in a classroom may result more specifically from a feeling of powerlessness to control negative outcomes. Moreover, it appears that considerate behavior in the classroom is most strongly related to perceptions

of control involving school personnel" (Bradley & Teeter, 1977, p. 234). The authors go on to explain this in terms of Rotter's (1975) position that in situations where one has considerable experience, specific expectancies have more valence than generalized expectancies.

For the reader interested in further literature in the area of locus of control and academic performance recent reviews have been written (Reynolds, 1976; Phares, 1976; Lefcourt, 1976; and Gilmor, 1978). Phares (1976) concluded his review by stating that:

> Internals tend to show superior academic achievement. The relationship seems more substantial for younger children but also seems to be present in young adults, whose behavior is likely to be determined by many more variables than is true for young children. But in the case of both objective and projective measures of achievement motivation, the results are quite inconsistent and even contradictory.
>
> (Phares, 1976, p. 111, my italics)

Lefcourt, after reviewing the literature relevant to cognitive activity, offered what might serve as an explanation of the tendency for internality being correlated to academic achievement:

> It would seem that the assumed differences in cognitive activity between internals and externals have been demonstrated. Internals have been found to be more perceptive and ready to learn about their surroundings. They are more inquisitive, curious, and efficient processors of information than are externals.
>
> (Lefcourt, 1976, p. 65)

Lefcourt further suggested that research inconsistencies might be resolved as more differentiated conceptions of locus of control in academic situations are devised (Lefcourt, 1976, p. 78).

Gilmor's review (1978) included studies which suggested that the effect of cognitive abilities is that of having a mediating effect on academic performance. For example, when social desirability was controlled for, Nowicki and Walker (1973) reported more consistent locus of control-achievement results for females. Supposedly, this trend is related to the female sex role of passivity. Other mediating factors found to have an influence included classroom structure (internals preferred "open" and cooperative classrooms) and intrinsic motivation (internals were better self-reinforcers). Locus of control and intelligence have never been consistently shown to be related (Gilmor, 1978).

Reviews which are particular relevance to educational psychologists, school psychologists and educators have been written by Chan (1977 & 1978). The 1977 manuscript is an extended version of an earlier writing and included a review of the use of both formal and informal assessment techniques. The 1978 article focused on both locus of control and achievement motivation. Chan concluded that ". . . each appears to influence the child's

approach to school-related tasks, interpretation of the outcome of tasks, selection of tasks, task persistence, and other achievement-related behaviors" (Chan, 1978, p. 108).

Modification of Locus Of Control Perceptions

If one is willing to make the judgement that internality is more desired than externality, the question of whether locus of control can be influenced in an internal direction becomes salient. Of greater concern are long term shifts in locus of control as opposed to the short term shifts related to situational influences. Phares noted that a general shift has occured for the overall locus of control orientations of college students since 1966. He interpreted the shift toward externality as being related to "the general spirit of alienation that has prevailed in the country over the past ten years or so, a period that included events such as the Vietnam conflict and the Watergate scandal" (Phares, 1976, p. 161). Of concern to this review were intentional efforts to change locus of control, especially in school related situations.

DeCharms (1972), in an oft cited study, introduced a construct very similar to locus of control when he wrote about modification of personal causation. He described two ways in which people perceive

themselves, pawns, and origins.

> When something external to the person impels him to behavior, he experiences himself as the instrument of the outside source, and the outside source is the locus of causality. He is said to be extrinsically motivated. Since the person is impelled from without we refer to him as a pawn. We sometimes talk of people as primarily pawns implying that they more characteristically see themselves as pushed around by outside forces. Conversely, we refer to people as primarily origins implying that they characteristically see themselves as originating their own behavior.
>
> (DeCharms, 1972, pp. 96-97)

The parallels between origins-pawns and internal-external locus of control are obvious. The major difference being that pawns and orgins are determined by the degree to which they see themselves manipulated as an object, whereas locus of control refers more to perceived contingencies (Lefcourt, 1976, p. 119).

DeCharms (1972) engaged his notions in a longitudinal three year study of training students to behave as origins. Teachers were taught to encourage origin rather than pawn behavior in the sample of sixth and seventh grade lower-class black students. The results were that (1) students in the experimental group perceived their classrooms as be more conducive to origin behavior and (2) strikingly different profiles of personal causation were evidenced for students as a result of training. The students in the experimental groups also failed to show the year-to-year increasing discrepancy with national norms on standardized achievement tests.

Rosen (1977) also found the classroom to be an appropriate place to study changes in locus of control. She examined high school students in a traditional and an "open" school. The students in the open school changed more toward an internal orientation during the school year. Students--especially the white students--from the open school also more often reported being able to get a job or a better job.

With the concept of locus of control having its origins in social learning theory, a large number of the studies have employed behavior modification in efforts to bring about change. Reimanis (1974) used behavior modification and counseling to increase the internality of grade-school children by making the children aware of cause-effect contingencies. Eitzen (1974) used a token economy to enhance the internality of delinquent boys. McCarthy (1974) reported better results in modifying locus of control through a behaviorally oriented treatment program than through a human awareness program. Kurash (1975) failed to achieve a significant change using a token economy with forth- and fifth-grade students. She attributed the failure to inefficient management of the token economy. Searcy (1975) used cognitive training to alter both locus of control and intelligence in first-grade children. Lepire (1977) found

mainstreamed exceptional students to have higher internal scores than students who attended special classes. McGeoch (1977) found evidence to support her hypothesis that the locus of control of preschoolers could be made more internal through verbal prompting of causal relationships with their peers and care givers. According to Herr (1977) teachers form more positive expectations of students they believe to be internal than for students they perceive to be externally orientated.

Gardner and Gardner (1974) reviewed the research pertaining to locus of control and various handicaps (e.g., mental retardation, learning disability, blindness, etc.). They expressed concern for the degree of authenticity perceived by handicapped students in the "successes" which are fabricated for them by their teachers. Because the contingencies for success are often different (usually less difficult and situation specific) from those experienced by non-handicapped students, the handicapped youngsters perceive them as being more externally oriented and less meaningful. Gardner and Gardner suggested a remedial program of daily practices (verbal prompting and reinforcement) and special lessons appropriate for use in special education classrooms to develop more realistic expectancies for control.

Phares presented a review of the pertinent literature regarding efforts to modify locus of control through psychotheraputic intervention (Phares, 1976, pp. 167-70). He concluded that efforts should be made to align theraputic intervention with the specific problem as indicated by the client's previous learning history.

Relationships between Self-concept and Locus of Control

The relationship between self-concept, self-acceptance and locus of control is complex. Many have tended to assume that positive self-concept and internality would go hand in hand. Most of the research in the area has been aimed at testing that assumption. The results have been inconclusive and sometimes appear contradictory. Research relating self-acceptance and internality is scarce, but such research may ultimately shed light on the interaction of self-concept and locus of control.

Feather (1967) attempted to examine some personality correlates of external control. Subjects were given tests for anxiety, need for achievement, social desirability, field-dependence, introversion-extroversion, neuroticism, and locus of control. There was a tendency for social desirability to be correlated with the personality variables and a shift toward internality was found for females

as they progressed through college. Younger males and both older males and females showed a relationship between anxiety and externality. Feather suggested two explanations. First, anxiety prone people may have had more failure experiences and tended to externalize the blame. Second, perceptions of external control may have lead to more anxiety. Feather suggested a need for further research.

Ziller et al. (1969) used their own self-esteem index, but were unable to find a significant relationship between self-esteem and locus of control. Research by Clouser and Hjelle (1970) established the presence of a relationship between dogmatism and locus of control. People with closed systems of belief-disbelief were found to be more external. Platt et al. (1970) failed to find a statistically significant correlation between internal-external control and self-esteem in three samples of college students. Beebe (1970) studied the developmental trends of locus of control and self-esteem in children and adolescents. She found the expected shift toward internality with increased age. Beebe also found internality (Bialer Locus of Control Scale) and self-esteem (Coopersmith Self-Esteem Inventory) to be related at all grades (4th, 6th, 8th, and 10th). Significant sex differences were not in evidence, but

10th grade girls were found to have unexplainably lower self-concept scores than 10th grade boys.

In a previously mentioned study Felker and Thomas (1971) found the relationship to be more complex. Boys showed a negative self-concept interaction with failure. That is, high self-concept boys externalized the attribution of responsibility for their failures. Girls showed a positive interaction between high self-concept and accepting responsibility for their successes. Boys apparently defended their positive self-concepts by denying responsibility for their failures, whereas girls defended their self-concepts by acknowledging responsibility for their successes. A similar study reported by Piers (1977) supported the results of the Felker and Thomas study.

St. John (1971) discussed the classroom as a "frog pond." She examined the effects of relative size and racial balance of classrooms (frog ponds) and the self-perceptions and feelings of control of black and white elementary students (frogs) in 36 sixth-grade classrooms. She said,

> Thus, in 'big frog ponds' (white middle class schools) white children have somewhat lower academic self-concept but much stronger general attitudes towards themselves and sense of control of the environment. Black children in these schools have low self-concepts in every way. However, their sense of control is high in both the most black and most white schools. (St. John, 1971, p. 589)

Some other findings by St. John revealed that: (1) contrary to the Coleman report, SES and level of achievement--not race--are the relevant factors in control attitudes, (2) for both races a positive correlation was found between locus of control and GPA and SES and (3) regression analysis pointed to GPA--not SES or percentage white--as accounting for the variance related to self-concept. Self-concept was apparently related to level of competition (positive self-concept correlating with high competition), whereas sense of control was related to relative GPA and relative SES (internality correlating with high GPA and relatively higher SES of peers). A return to the frog pond may clarify these relationships.

> For self-concept it is most important to be a big frog, and this is easier in a little pond (and especially if raised in a bigger pond). For sense of control it is important to be a big frog, but it is also important to be in a big pond.
>
> (St. John, 1971, p. 594)

Fish and Karabenick (1971) measured locus of control and self-esteem for 285 college males. They found that those subjects with internal Rotter I-E scores tended to be the same ones who provided high self-esteem scores. In his review, Joe (1971) summarized the personality characteristics of people who score toward the external pole as being more: anxious, aggressive, dogmatic, and fearful of failure.

Kay (1972) reported a study which essentially confirmed the earlier notion of Felker and Thomas that high self-concept boys deny responsibility for failure. Another replication of a previously reported study was that of Ryckman and Sherman (1973) who duplicated the above mentioned Fish and Karabenic study. Women were added to the sample and the same results were obtained. That is, for both male and female college students, self-esteem and internal locus of control were correlated. Heaton and Duerfeldt (1973) also reported significant correlations between locus of control and self-esteem among college students.

A study similar to the proposed study was that of Lombardo, Fantasia and Solheim (1975). Their concern was with locus of control discrepancies and self-acceptance. Their sample was 73 college students. Their measures were Rotter's I-E scale and a 40 item self-acceptance scale. A difference score was determined for both locus of control and self-acceptance. For both measures the discrepancy scores for externals were greater. Externals showed less self-acceptance than

internals. Externals showed greater desire to be more internal than did internals. The study was replicated by Lombardo and Berzonsky (1975) using both male and female subjects. The results were the same i.e., both male and female subjects who scored toward the external pole showed less self-acceptance and a greater desire to be more internal.

Donovan et al. (1975) examined the relationships between locus of control, self-concept and anxiety using 60 male alcoholics as subjects. Significant results were obtained between external locus of control and anxiety but not between locus of control and self-concept. Chandler (1976) used the Index of Value and Adjustment test and the Nowicki-Strickland Internal-External Scale to determine that, ". . . if self-actualization is a desired goal, externals will not move in this direction without a strong demonstration of a sense of power" (Chandler, 1976, p. 146). With children as subjects, DeAnda (1976) explored the interactions of self-concept, locus of control, achievement, and classroom social status. He found locus of control and social status to be good predictors of self-esteem in the classroom and that locus of control and academic achievement interacted to account for a significant amount of the self-esteem variance.

Moyal (1977) found that self-concept, locus of control, and depression were related for the fifth-

and sixth-grade students she studied. Cohen and Lefkowitz (1977) also discovered locus of control and self-concept to interact for high school students. Tolor, Tolor and Blumin (1977) reported that among elementary-aged children self-concept--but not locus of control--was an accurate predictor of need for special education services. Gordon (1977) found a relationship between self-concept and locus of control for forth-graders. He further found that while males' locus of control scores were related to grade point averages, females' locus of control scores were related to achievement test scores. He attributed this difference to contrasting socialization for males and females. The reader interested in related studies and thought regarding the relationships between self-concept and locus of control is referred to Felker (1974), Phares (1976), and Lefcourt (1976, 1978a, 1978b, & 1980, in press).

Sex and Age Related Factors Pertaining to Self-concept and Locus of Control

The relationship between self-concept and sex is unclear and apparently related to other factors. Hamachek discussed the influences of parenting styles, birth order and changing sex roles--especially women's liberation--on self-concept (Hamachek, 1978, pp. 144-90). The recent trend

has been toward firm but understanding parenting styles and less restrictive sex role typing. Stollak (1978) has presented his interpretation of the theory and research regarding caregiver behaviors intended to encourage the development of competent and self-accepting persons. Stollak stated that the characteristics of such persons are not "culture bound or limited to men or women" (Stollak, 1978, p. 2).

Light (1976) reviewed the research literature and found inconsistent reports of a self-concept and sex relationship. But, she noted that "although no differences may exist in the findings of some studies, no studies could be found which indicated that females had a stronger self-concept in any aspect, whereas studies were found which indicated that males had stronger or more positive self-concepts than females" (Light, 1976, p. 19).

The age at which one's self-concept can be said to exist depends on how self-concept is defined. For example, Hurlock discussed "babyhood self-concept" (Hurlock, 1975, p. 87). Most theorists and researchers have concluded that by the time a child reaches the early elementary school grades a self-concept which can be operationally defined and measured is present. Research supporting this contention has been reported by Stenner and Katzenmeyer who summarized by stating that, "The child's concept

of self crystalizes during the early school years, during which period a massive process of psychological and social maturation takes place" (Stenner & Katzenmeyer, 1976, p. 356).

Hansen and Maynard (1973) and Hamachek (1978) have reviewed the literature regarding the consistency of behavior over time and concluded that many characteristics found in children when they were young persisted into adolescence. But what about self-concept differences between children at different grade levels? In their classic study, Piers and Harris (1964) reported that students in grades 3 and 10 provided higher self-concept scores than students in grade 6. Havinghurst (1946) had subjects write an essay on self-acceptance ("The Person I Would Like to Be"). Younger children's self-acceptance was found to be more dependent upon parental influence, whereas older children depended more on persons outside of their families. An interesting study by Sheikh and Beglis (1973) also demonstrated the effect of age on self-description. Younger students (second-graders) tended to think of themselves in terms of basic identification. When asked to describe how they perceived the themselves, they responded with such replies as "I am tall" or "I am a girl." More expanded replies were received from forth-graders, such as "I am a good ball player" or "I enjoy monster movies."

By sixth-grade, students made more future oriented self-references and mentioned the opposite sex more often. Further evidence of differences in the way people view their selves at different ages was provided by Montemayor and Eisen (1977). Various aged children and adolescents were administered self-descriptive measures. As age increased so did self-perceptions of: occupational roles, existential individuating (e.g. "me, I, myself"), belief references (e.g. liberal), self-determination, sense of unity, future orientation, and psychological styles. As age increased, there was a decrease in self-perceptions of: territorially, citizenship (e.g. "I am a Spartan"), material possessions, and physical being.

Gilmor (1978) has reviewed the research literature pertaining to sex and locus of control. Nowicki has been involved in most such research (Nowicki & Roundtree, 1971; Nowicki & Walker, 1973; Duke & Nowicki, 1974; and Nowicki & Walker, 1974). The primary concern has been with the relationships between sex, locus of control, achievement, and social desirability. In general the results have been inconclusive, especially for females. Research aimed at examining the possibility of a simple relationship between sex and locus of control (Nowicki & Strickland, 1973 for example) have not

found differences in response patterns between males and females.

A shift from externality toward internality as children become older has been examined by previous researchers (Crandall et al., 1965; Penk, 1969; Milgram, 1971; Nowicki & Strickland, 1973; and Piers, 1977). This age related shift has been attributed to increased cognitive ability, improved perceptions of cause-effect relationships and more competent levels of functioning (Lefcourt, 1972). Bradley and Webb (1976) found a reversal in this shift for persons over 60 years of age. As compared to people aged 35-50 years, people over 60 became more external along both physical and social domains, but not intellectual domains. The authors interpreted this tendency in terms of James' (1890) self-esteem definition (self-esteem=success/pretensions). For the young and the old the perceived probability of success is low relative to their pretensions.

Some Considerations Pertaining to Self-concept, Self-acceptance and Locus of Control Research

Some methodological considerations of the proposed study of self-concept include: (1) the relatively perplexing state of self-concept theory, (2) the lack of a consistent definition of self-concept and self-acceptance, (3) demographic and

situational influences related to self-concept scores in children, and (4) the research concerns associated with evaluation of discrepancy or difference scores for self-acceptance measures.

Wylie (1974) made three general recommendations regarding problems of self-concept measurement. First, she suggested a trend toward a small number of instruments. Second, she proposed an organized rational program of instrument development in order to maximize the benefits of modern standards and techniques. Third, she advocated systematic exploration of situational variables believed to influence self-concept responses (Wylie, 1974, pp. 123-33). Peterson (1977) discussed Wylie's concerns when he wrote the introductory article for the issue of the Journal of Youth and Adolescence (Volume 6, Number 4, December, 1977) which was devoted to the measurement of self-concept.

A potential concern in working with self-acceptance as the difference between one's real and ideal self-concept is the manipulation of discrepancy scores. Wylie (1974) has summarized some concerns to be considered when working with difference or discrepancy scores. The principal arguments against the use of discrepancy scores were posited by Cronbach and Furby (1970). Cronbach and Furby suggested a weighting system (X-aY) in order to

better estimate subjects' true scores when using discrepancy measures. Wylie argued that such a weighting system was not necessary when using phenomenal discrepancies such as self-ideal differences.

> That is, since the discrepancy is presumably something S can experience as a difference between his actual self-concept and his ideal for himself, there seems to be a theoretical reason to try to operationalize it by a subtractive score, as free as possible of irrelevant influences, of course. (Wylie, 1974, p. 91)

In effect, Wylie said that both real self and ideal self perceptions are both phenomenological descriptions which involve a difference between two points on the same line. They are along the same dimension, unlike the scores to which Cronbach and Furby raised objections (self-other discrepancies, for example).

According to Judd and Smith (1974), a common error has been to compare real and ideal self-concept scores along dimensions determined solely by factor analyzing self-concept. When both real and ideal self-concept were factor analyzed it was determined that different loading existed for the dimensions of each. For this reason, comparisons between separate real and ideal self-concept factors were not pursued.

Another potential problem of using discrepancy scores is that if the two measures are highly correlated--as the self-concept and self-acceptance

measures would probably be--the difference scores are less reliable (Wylie, 1974, p. 91-92). Thorndike (1971) suggested that use of group difference scores, rather than individual difference scores, provides a coefficient that is reliable enough to be considered acceptable (Thorndike, 1971, p. 390). Two estimates of true score are determined for each individual (one for ideal self and one for real self). The amount of error variance decreases if group means are used because the deviations from the means tend to cancel each other out.

A further advantage of using group means is that the probability of having to work with negative discrepancy scores is decreased. Any time difference scores are computed, the chance exists that subtracting one score from another will result in a negative number. Theoretically, a person could have a higher real self-concept than ideal self-concept. Wylie referred to such scores as "reverse discrepancies" (Wylie, 1974, pp. 94-95). The problems of interpreting and statistically analyzing such scores is diminished when the scores are treated as a group.

Lefcourt (1976) summarized the present status of locus of control assessment by stating that "there is enough evidence to encourage investigators to both continue in their use of existing devices and

to develop newer, more criterion-specific measures" (Lefcourt, 1976, p. 137). Two focal points which deserve further study are differences in scores along various dimensions (e.g. race and sex) and the extent to which verbal fluency effects locus of control scores. Lefcourt (1976) offered three considerations: (1) expectations should not become too great regarding the importance of locus of control, other variables must be given appropriate attention, (2) internal and external locus of control should not be viewed as a trait--it is a process of expectance and (3) assessment devices should be tailored for specific situations.

Summary

Four basic objectives were covered in this chapter. First, the literature relevant to self-concept and self-acceptance was reviewed. Special attention was given to definitions of self-concept, self-acceptance and related terms. Self-concept and self-acceptance were found to be related to personality characteristics and to academic performance. Evidence showing that self-concept can be modified was examined. Various methods, such as behavior modification and an assortment of group techniques, have proved effective in changing self-concept.

The second objective was to examine the literature relevant to locus of control. It was found that students with internal loci of control tended to be better academic achievers. It was also found that locus of control has been modified using a variety of methods.

The third objective was to describe the research concerned with the complex relationship between self-concept and locus of control. Consistent results were not as evident for the self-concept and locus of control relationship as they were for the locus of control and academic achievement relationship. Some evidence was found suggesting that the interaction between self-acceptance and locus of control might yield information regarding this relationship.

Finally, the review of literature supported the proposal that further research is warranted pertaining to the relationship between self-concept, self-acceptance and locus of control. Research concerns were discussed.

The following conclusions pertaining to the research hypotheses have been reached based on the review of the relevant literature:

1. The available research has indicated that adults with internal loci of control tend to be more self-accepting. Such research has not been done with children.

2. Previous research has generally found that positive relationships exist between self-concept and locus of control.

3. Because of the theoretical and definitional similarities of the notions of self-concept and self-acceptance, a high degree of relationship probably exists, but empirical evidence of such a relationship was not found.

4. A developmental trend from externality toward internality as children's grade level increases has consistently been found.

5. The positive relationship between grade level and self-acceptance has been found to be influenced by sex and maturation.

6. Research evidence indicating that self-concept changes as students progress through grade levels has been found to be complex and at times inconsistent. Development is characterized by both stability and change.

7. In general, significant differences between males and females on locus of control measures have not been in evidence. Many studies designed to examine the relationship between sex and locus of control have found other factors (especially academic success experiences) to have a mediating effect.

8. Adult males and females have responded in similar manners to measures of self-acceptance.

9. The research has been inconclusive regarding sex related differences in self-concept.

10. Whenever possible, multiple interactions between the variables of interest were discussed in the review of the literature.

The review of the literature has suggested a need for further research and, at times, indicated possible

directions in which research hypotheses should be viewed.

CHAPTER III

METHODOLOGY OF THE STUDY

This research was aimed at investigating the relationships between self-concept, self-acceptance and locus of control for male and female children and adolescents. The method used to explore these relationships is described in this chapter under the following subheadings: the sample, instrumentation of the study, operational definitions, design of the study, and data reduction and analysis.

The Sample

Description of the Sample

This study sampled students from the Jackson, Michigan Public Schools during June of 1979. Jackson is a city of 45,000 people located in central lower Michigan. Of the 50,600 employed people in the Jackson County area, 26,200 are employed in non-manufacturing jobs, 15,700 are employed in manufacturing jobs, and 8,700 are employed in government jobs. The unemployment rate is 8.3 percent. The per capita income is approximately

$4,500 per year, with the average household having an effective buying income of about $17,000 per year. About 12,000 of Jackson County's 143,000 residents are college students. Jackson Public Schools operate on a millage rate of 37 mills.[1]

Of the 134 students in the sample 65 were in one elementary school (grades 3, 4 and 5) and 69 were in one middle school (grades 6, 7 and 8). A more complete description of the sample broken down by grade level and sex is provided in Table 3-1. Based on descriptions provided by school personnel, the sample fairly well represented the general population of the area. Students from lower SES homes may have been somewhat more in evidence in the elementary school population than the middle school population. School personnel suggested this difference based on the presence of a small low income housing project near the elementary school. More blacks (17%) took part at the elementary level than at the middle school level (13%).

Selection Procedure for Subjects

Efforts were made to obtain responses of subjects from the same school district. This was

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[1]Information obtained from the Jackson Chamber of Commerce booklet "Everything You Ever Wanted to Know about Jackson" printed in September, 1978.

TABLE 3-1

DISTRIBUTION OF SUBJECTS
BY SEX AND GRADE

		Grade Level					
		Elementary (n=65)			Middle (n=69)		
		3	4	5	6	7	8
Sex	Males (n=66)	11	12	11	11	11	10
	Females (n=68)	8	9	14	13	15	9
	Total (N=134)	19	21	25	24	26	19

done in order to reduce the likelihood of measured differences being due to disparities in uncontrolled demographic variables such as economic status, parental education, or religious beliefs. This particular school district was chosen because of its perceived representiveness of the general population, willingness for cooperation by school personnel, and geographical proximity.

The sample is biased to the extent that only those classrooms in which school personnel gave permission were included. Further selection bias was possible because of potential differences in response tendencies by parents to the cover letter sent home requesting parental permission (Appendix A). Guilford has referred to such selection methods as "incidental selection" (Guilford, 1965, p. 142). The degree to which this incidental sampling influenced the results depends on whether the students' responses were in anyway correlated with their willingness and the willingness of their parents and school personnel to participate. The author did not perceive the incidental sampling bias as being a significant threat to the generalizability of the results of this study. Such ethical and legal considerations are a necessary part of any research involving human subjects.

Instrumentation of the Study

Three scales were used to measure self-concept, self-acceptance and locus of control. A measure was chosen as appropriate for inclusion based on the available data regarding reliability, validity and age range of the instrument. The three measures chosen were the Piers-Harris Children's Self-Concept Scale, the Bledsoe Self-Concept Scale and the Nowicki-Strickland Locus of Control Scale for Children. Each scale has its relative merits.

The Piers-Harris Children's Self-Concept Scale

The Piers-Harris Children's Self-Concept Scale (also referred to as "The Way I Feel About Myself") was developed based on the writings of Rogers and Jersild (Piers & Harris, 1964 and 1969). The original 152 item pool was derived from the categories suggested by Jersild (1952). Factor analysis has provided six interpretable factors: (1) statements of behavior, (2) school related standing, (3) physical appearance, (4) anxiety, (5) social popularity, and (6) happiness (Crandall, 1973). The scale consists of 80 simple declarative statements which may be answered "yes" or "no" depending on how the subjects generally perceive the statement as an accurate description of their selves. An equal number of positive and negative statements were selected for inclusion. Selection

of the final 80 items depended on the ability of each item to discriminate between high and low scorers.

Sample items exhibit the form and content of the items:

12. I am well behaved in school.

16. I have good ideas.

51. I have many friends.

54. I am good looking.

74. I am often afraid.

These sample items were taken from Crandall (1973, p. 74) who recognized the "commercial nature" of the scale as the reason not to reproduce it in whole.[1]

The desire of Piers and Harris was a scale which could be used with children over a wide age range to examine self-concept correlates. The scale was originally standardized on 1,183 students in four classes at the third-, sixth-, and tenth-grade levels (Piers & Harris, 1964). The scoring key was revised in 1977.

The Kuder-Richardson Formula 21 (K-R 21) was used to test for homogeneity with estimates generally falling in the .90 area. The exception

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[1]Sample copies of the complete scale, manual, and other updated information can be obtained from: Counselor Recordings and Tests, Box 6184 Acklen Station, Nashville, Tennessee, 37212.

was that the reliability score was at .78 for the responses of the tenth-grade girls. Piers and Harris attributed this difference to the underestimating tendency of the K-R 21 due to its dependence on size of standard deviations. Odd-even split half (Spearman-Brown) reliabilities were also reported to be in the .90 area. Respectable test-retest reliabilities in the .70s were found after four months. The scale was validated using institutionalized versus non-institutionalized subjects. Piers and Harris also discussed factor analytic correlates of the scale (Piers & Harris, 1964, pp. 94-95).

Crandall (1973) reviewed the reported research pertaining to the convergent, discriminant and predictive validity of the Piers-Harris Self-Concept Scale. Anxiety has been found to be negatively correlated with self-concept. Social desirability, achievement and intelligence have been found to have low, but positive, correlations with the scale. A recent study of the factorial validity of the Piers-Harris scale has been reported (Moran, Michael & Dembo, 1978). Developers of new measures of self-concept for children, Parish and Taylor (1978) for example, have used the Piers-Harris as their standard of validity.

Wylie (1974) listed the Piers-Harris scale along with the Coopersmith inventory as the most frequently used children's self-concept measures.

Wylie also evaluated the previous efforts at validation of the scale. She concluded that further validation is warranted. A specific concern she elaborated dealt with potentially lower item stability for low self-concept subjects due to the chance of unreliable response tendencies toward the lower extreme of the Piers-Harris scale. Research by Smith and Rogers (1977) failed to support Wylie's predicted concern.

Bentler (1972) has reviewed the literature pertaining to the Piers-Harris scale. His review was generally positive although he suggested clarification of the manual. Crandall (1973) listed the Piers-Harris scale as highest in overall quality and in recommended usage. Recent comparative reviews (Robinson & Shaver, 1973 and Shavelson, Hubner & Stanton, 1976) of self-concept measures have found the Piers-Harris scale to be one of the best--if not the best--measures available for determining children's self-concept.

The Bledsoe Self-Concept Scale

Of the five or so measures of children's self-acceptance, the Bledsoe Self-Concept Scale (Appendix B) is most appropriate for the needs of this study. Bledsoe (1964 & 1973) developed a self-concept scale which provided both a real and an ideal self-concept score. The scale is based on a previously devised scale of Lipsitt (1958), which, in turn,

was based on Bills' et al. (1951) scale. The original Bills self-acceptance scale was validated with the Rorschach. Reliability indices of between .77 and .90 were reported.

The Bledsoe Self-Concept Scale (Appendix B) differs from the previous scales in that three rather than five categories were offered. Subjects are asked to rate the extent to which they perceive each of 30 adjectives as being accurate descriptions of their real and ideal selves. The statement, "This is the way I am" is used to elicit real-self responses to the adjectives. The statement, "This is the way I would like to be" is used to elicit ideal-self responses. Although it was not specified, it appears as if the adjectives were drawn from the semantic differential scales (evaluation, potency and activity) of Osgood et al. (Osgood, Suci & Tannenbaum, 1957). Eighteen adjectives were scored positively (e.g. friendly, brave) and tweleve were scored negatively (e.g. quiet, poor).

Test-retest reliabilities were somewhat higher for older subjects (.81 for 14 year olds) than for younger subjects (.66 for eight year olds) for a two-week interval. Negative correlations (-.30 to -.46) have been found between the Bledsoe scale and anxiety (Bledsoe, 1964). Positive correlations have been found between the scale

scores and intelligence, achievement and adjustment (Johnson, 1974).

In personal correspondence with Dr. Bledsoe (5/8/79), he indicated that factor analysis of both the self-concept and self-acceptance parts of the scale were homogeneous. All except three of the adjectives loaded .30 or higher. Further support of the homogeneous nature of the scale was provided by the fact that both the Varimax and Iuartimax solutions were identical. This data is soon to be submitted for publication.

The Nowicki-Strickland Locus of Control Scale

Nowicki and Strickland based their scale (Appendix C) on Rotter's original locus of control scale. It consists of 40 items which are answered either "yes" or "no". For example, one item reads, "Do you feel that when good things happen they happen because of hard work?" To answer "no" would add one point to that person's external score. The total number of external responses is that person's score.

Nowicki and Strickland (1973) administered the scale to 1,017 third- through twelth-grade students. All socioeconomic areas were included in the original sample, with the lower areas being somewhat overrepresented and the very highest level being underrepresented. All subjects had intelligence test scores that fell within the average classification

range. Internal consistency (Spearman-Brown split-half) was reported by groupings of grade levels: r=.63 for grades 3, 4, and 5; r=.68 for grades 6, 7, and 8; r=.74 for grades 9, 10, and 11; and r=.81 for grade 12. Test-retest reliabilities were in the .60s and .70s after six weeks. Locus of control was found to not correlate with social desirability.

McDonald described the scale as "the best measure of locus of control as a generalized expectancy presently available for children" (MacDonald, 1973, p. 208). He reported correlations of between .31 and .51 with other scales. Phares (1976) reported split-half correlations of .63 to .81 for the Nowicki-Strickland scale. Test-retest reliabilities of .63 (third-graders) to .71 (tenth-graders) were given. Construct validity was evidenced by scores from the scale correlating with grade-point averages, popularity, prejudice, and ability to delay gratification.

Operational Definitions

Self-concept

For the purposes of this study, self-concept is operationally defined as the score obtained on the Piers-Harris Children's Self-Concept Scale. The items are scored in the direction of a high or adequate self-concept. The theoretical and research basis of

the scale is based on previously discussed writings of Rogers and Jersild.

Self-acceptance

Self-acceptance is operationally defined as the degree of congruence between subjects' real and ideal self-concept responses on the Bledsoe Self-Concept Scale. Bledsoe based his definition on Bills' (1951) definition of the two characteristics:

> . . . (1) that the individual has information relative to his present self-organization, and (2) that the individual has a view of himself as he wishes to be.
>
> (Bills, Vance & McLean, 1951, p. 257)

The former he referred to as "self-concept"; the latter as "concept of ideal self." This definition is consistent with that offered by Hamachek who defined self-acceptance as "the extent to which a person's self-concept is congruent with his description of his 'ideal' self" (Hamachek, 1978, p. 249).

Locus of Control

The operational definition of locus of control is the score received by subjects on the Nowicki-Strickland Locus of Control Scale. Subjects receiving a high score are said to have an external locus of control, whereas those receiving a low score are said to have an internal locus of control. A high score (external) indicates that a subject has

responded in a manner which suggests a control expectancy based on "luck, chance, fate, as under the control of powerful others, or as unpredictable . . ." (Rotter, 1966, p. 1). A low score (internal) indicates that a subject has responded in a manner which suggests that "the event is contingent upon his own behavior or relatively permanent characteristics . . ." (Rotter, 1966, p. 1). The use of such a generalized definition was preferred as the research interest was in general expectancies rather than some situation specific expectancy.

The Testable Hypothesis

The hypotheses have been re-stated here in a testable form with predicted directions for the relationships between the variables where possible. The rationale of the predictions are based on the theory and research reviewed in the first two chapters.

1. A positive correlation exists between self-acceptance (Bledsoe scores) and internal locus of control (Nowicki-Strickland scores).

   Rationale: Those people who perceive that they are much like the person they would like to be would be the same ones who feel that they are in control of the important contingencies in their lives. As a person learns to accept his or her self, that person's feelings of internal control would also tend to increase. It is easier for a person to take responsibility for one's actions if that person is reasonably satisfied with the extent to which he or she is similar to the person he or she would

like to be. This hypothesis is directional, but it is not intended to suggest a causal relationship between self-acceptance and locus of control. That is, although it is believed that these two factors will show a correlational relationship, it is not known what influence each has on the other or what other factors influence the relationship. Previous research has confirmed this relationship for adults but such research with children has not been reported.

2. A positive correlation exists between self-concept (Piers-Harris scores) and internal locus of control (Nowicki-Strickland scores).

   Rationale: As a person's perceptions of what she or he can call "me" or "mine" are seen as being more valued, that person will tend to feel more in command of the contingencies in her or his life. Again, a causal relationship is not meant to be suggested. It seems that the same variables which influence one's self-concept would also influence locus of control. Likewise, as a person felt as if she or he was in charge of her or his life that person would tend to have a more enhanced concept of self. For example, a student who feels that he was directly responsible for a good grade would tend to feel better about himself than would a student who did not feel responsible for a good grade. Previous research has shown there to be a correlational relationship between self-concept and locus of control for both children and adults.

3. A positive correlation exists between self-concept (Piers-Harris scores) and self-acceptance (Bledsoe scores).

   Rationale: It follows from the rationale offered for the above hypotheses that a relationship would also be found between the positive comprehension one has of his or her self and the extent to which one perceives being in control of his or her life. As a person's self-image increases, so will that person's degree

of congruence between real and ideal self-concept. It seems reasonable to assume that the same factor(s) which cause self-concept to improve would also cause self-acceptance to increase.

4. A positive relationship exists between grade level and internal locus of control (Nowicki-Strickland scores).

   Rationale: As a person becomes older, more knowledgeable and progresses through developmental stages, that person will tend to be more in control of the important contingencies in his or her life. In addition to improved competencies, our various social systems also contribute to perceptions of internal locus of control by allowing for more independence. Being allowed to become increasingly more in control of life's important contingencies would influence a person toward an internal locus of control as that person becomes older. Previous research has supported the notion of a positive relationship between age and internal locus of control.

5. A positive relationship exists between grade level and self-acceptance (Bledsoe scores).

   Rationale: As a person progresses from grade to grade he or she will gain in the ability to be like the person he or she would ideally like to be. There also exists the possibility that individuals adjust their real and ideal self perceptions to be more congruent as they move through life. It is not uncommon to hear people speak of adapting their goals to be more "realistic" as they age.

6. A relationship exists between grade level and self-concept (Piers-Harris scores).

   Rationale: This hypothesis was included to determine whether or not differences exist between self-concept scores for subjects at various grade levels. The hypothesis is non-directional. Previous

research has not found differences for the grade levels included.

7. A relationship exists between sex of subject and locus of control (Nowicki-Strickland scores).

   Rationale: This hypothesis was included to determine whether or not more in depth analysis was necessary regarding sex differences and locus of control. Previous research has not found such differences.

8. A relationship exists between sex of subject and self-acceptance (Bledsoe scores).

   Rationale: This hypothesis was also included to check for differences due to sex of subjects. The variable of concern is self-acceptance. Previous research has not found significant differences.

9. A relationship exists between sex of subject and self-concept (Piers-Harris scores).

   Rationale: The purpose of including this hypothesis was to determine how males and females respond to the self-concept measure. Previous research has not found significant differences in how the two sexes respond to the self-concept measure at either the elementary or middle school level.

10. Relationships exist between the interactions of: self-concept (Piers-Harris scores), self-acceptance (Bledsoe scores), locus of control (Nowicki-Strickland scores), grade level, and sex of subject.

    Rationale: It is desirable to further explore the interrelationships of the variables whether their primany correlations or main effects prove significant or not. Such exploration can take the form of more detailed correlations and analyses of variance along with regression analysis.

These hypotheses are shown in Table 3-2.

TABLE 3-2

INTERACTIONS OF VARIABLES TO FORM THE RESEARCH HYPOTHESES

	Locus of Control	Self-acceptance	Self-concept	Grade
Self-acceptance	1			
Self-Concept	2	3		
Grade	4	5	6	
Sex	7	8	9	10*

* Hypothesis 10 refers to the multiple interactions of the variables.

Design of the Study

The basic design of the study, based on the hypotheses, has been presented in Table 3-2. Three of the variables (self-concept, self-acceptance and locus of control) were determined by subjects' responses to the previously described measures. Sex of subject was determined by having subjects check the appropriate space on the packet containing the measures. Grade level was based on present grade placement.

Procedure

Subjects were told that the examiner was gathering information regarding attitudes, feelings and opinions of students in different grades. A promise of strict confidentiallity was given. (See Appendix A). These general directions and an opportunity to ask relevant questions and concerns were handled as they occurred. The instructions provided with each of the scales were followed as closely as possible.

Data Reduction and Analysis

Three scores (self-concept, self-acceptance and locus of control) were obtained for each subject. These scores were coded on computer scoring sheets then

computer punched on cards along with a subject number, grade level, and sex for each subject.

The nature of the hypotheses is such that three methods of analysis were appropriated to test them. First, correlational techniques were implemented to determine the direction and degree of the suggested relationships. The first three hypotheses were analyzed using correlational techniques.

Second, analysis of variance (ANOVA) techniques were implemented to compare the differences between means for the various groupings of the subjects. The fourth through ninth hypotheses were analyzed using analysis of variance.

Third, multiple regression was seen as appropriate for use to analyzing the relative strength between any one of the variables and two or more of the others taken together. Such an analysis would reveal the intercorrelations between the dependent and independent and among the independent variables.

Additional examination of the data was done whenever it seemed appropriate. That is, for most of the previously discussed hypotheses separate analysis was done to determine whether the discovered relationships existed for males and females and for each of the grade levels.

A .01 level of significance was established to specify the limit at which hypotheses would be either accepted or rejected.

Summary

The methods used to test the proposed hypotheses was discussed in this section. The sample and selection procedures were described. The specific instrumentation of the study was discussed along with evidence of reliability and validity. The terms were operationally defined and the testable hypotheses specified. Finally, the design of the study and the methods of data reduction and analysis were described.

CHAPTER IV

RESULTS OF THE DATA ANALYSIS

In Chapter IV, analyses of the hypotheses developed in the previous three chapters are revealed. Three sections are used to discuss the results. In the first section support for the first nine hypotheses, as stated in Chapter III, is presented. In the second section the correlations and interactions for the relationships between the independent variables (grade and sex) and the dependent variables (self-concept, self-acceptance, and locus of control) are examined. In the third section the multiple correlations of the scores for the self-concept, self-acceptance and locus of control measures are presented to further explore their relationships.

The polarity of the self-acceptance and locus of control scores were each reversed. This was done to make the direction of the scores consistent with hypotheses and with the operational definitions of the terms. Consequently, a high self-acceptance score indicates a high degree of self-acceptance (congruence between real and ideal self-concept) and a high locus of control score signifies an internal locus of control orientation.

Tests of the Hypotheses

The dependent variables in this study are self-concept, self-acceptance and locus of control. The independent variables in this study are grade level and sex of subject. The hypotheses concerned with the relationships between the dependent variables will be tested with correlational techniques. The hypotheses pertaining to the relationships between the dependent variables and the independent variables of grade level and sex will be tested with analysis of variance techniques. A level of statistical significance of less than .01 (p less than .01) had previously been established.

Concern will also be shown for the meaningfulness of the correlations found between the dependent variables. Because of the relatively large number of subjects (N=134), a moderate correlation such as r=.30 will be statistically significant, but concern remains over how meaningful such a correlation is. The coefficient of determination, or r^2, is the amount of variance of variable Y determined by variable X. For example, the square of the correlation coefficient r=.30 equals .09, indicating that 9% of the variance of one variable can be accounted for from the scores on the other variable. It is the size of this value that indicates the proportion of the variance of Y determined by X. An F ratio for this correlation may be significant even though the correlation itself is small. The author prefers to base the importance of the

variables' relationships on this proportion of variance rather than a simple F ratio. It is important to clearly distinguish between statistical significance and the magnitude and importance of the relations of the variables. The magnitude of a relation may be in fact trivial (R^2=.05) when an F for the same relation (R=.22) is significant at the .05 level (Kerlinger & Pedhazur, 1973, p. 72).

Hypothesis 1

Hypothesis 1 suggested that a positive correlation exists between self-acceptance (Bledsoe scores) and internal locus of control (Nowicki-Strickland scores). The Pearson correlation coeficient between self-acceptance and internal locus of control was .27 (accepted, $p<.01$). Although this coefficient reached significance, its size indicates that the degree of the relationship between self-acceptance and locus of control is low, and only about 7% of the variance in Nowicki-Strickland scores can be predicted by the values of the Bledsoe scores.

Hypothesis 2

Hypothesis 2 stated that a positive correlation existed between self-concept (Piers-Harris scores) and internal locus of control (Nowicki-Strickland scores). The Pearson correlation coefficient between self-concept

and locus of control was .38 (accepted, $p<.01$). The relationship between self-concept and locus of control is statistically significant and about 14% of the variance in one of the variables can be accounted for by scores on the other variable.

Hypothesis 3

Hypothesis 3 posited that a positive correlation exists between self-concept (Piers-Harris scores) and self-acceptance (Bledsoe scores). The Pearson correlation coefficient between self-concept and self-acceptance was .55 (accepted, $p<.01$). The relationship between self-concept and self-acceptance is statistically significant, and about 30% of the variance of one variable can be accounted for by knowing the values of the other variable.

Hypothesis 4

Hypothesis 4 stated that a positive relationship would be found between grade level and internal locus of control (Nowicki-Strickland scores). A univariate analysis of variance was performed and it was determined that such a relationship existed ($F=5.5818$; $df=5, 128$; $p<.01$). An examination of the means (Table 4-1) shows that locus of control scores tended to become

more internal as subjects progressed through school. The largest gains were found at about the time subjects entered middle school (grades 5 and 6).

TABLE 4-1

INTERNAL LOCUS OF CONTROL MEANS AND STANDARD DEVIATIONS FOR ELEMENTARY AND MIDDLE GRADES

	Grade Level					
	Elementary (n=65)			Middle (n=69)		
	3	4	5	6	7	8
Mean	20.21	20.58	23.52	25.29	24.81	25.16
Standard Deviation	5.02	2.87	4.41	4.87	4.21	5.16

Hypothesis 5

Hypothesis 5 was included to determine whether a relationship existed between grade level and self-acceptance (Bledsoe scores). The results of the univariate analysis of variance suggested that a statistically significant relationship did not exist between grade level and self-acceptance ($F=1.9916$; $df=5, 128$; $p>.01$).

Hypothesis 6

Hypothesis 6 stated that a relationship would be found between grade level and self-concept

(Piers-Harris scores). A univariate analysis of variance revealed that the relationship between grade level and self-concept was not statistically significant ($F=2.919$; $df=5, 128$; $p>.01$).

Hypothesis 7

Hypothesis 7 posited that a relationship existed between sex of subject and locus of control (Nowicki-Strickland scores). A univariate analysis of variance failed to find a statistically significant relationship between sex of subject and locus of control ($F=0.1159$; $df=1, 128$; $p>.01$).

Hypothesis 8

Hypothesis 8 was directed at examining the possibility of a relationship existing between sex of subject and self-acceptance (Bledsoe scores). Again, an analysis of variance was used and it was determined that the relationship between sex of subject and self-acceptance was not statistically significant ($F=0.7482$; $df=1, 128$; $p>.01$).

Hypothesis 9

Hypothesis 9 stated that a relationship existed between sex of subject and self-concept

(Piers-Harris scores). No such relationship was found when the self-concept scores were examined by sex of subject using analysis of variance techniques ($F=1.7163$; $df=1, 128$; $p>.01$).

Relationships between the Dependent and Independent Variables

The purpose of this section is to further examine the interactions of the dependent variables (self-concept, self-acceptance and locus of control) when they are isolated according to the independent variables (grade level and sex of subject). This task will be undertaken in two parts. The first part is designed to take a more detailed look at the correlations between self-concept, self-acceptance and locus of control when examined by grade level (elementary and middle) and sex of subject (male and female). The second part is designed to explore the interactions of grade and sex for each of the dependent measures.

Part One. Grade Level and Sex of Subjects Correlates Between the Dependent Variables

Hypothesis 1 dealt with the correlation between self-acceptance and locus of control. When the hypothesis was examined for all subjects as a group it was found to be statistically significant, but it accounted for a small proportion of the total variance. Further exploration was warranted.

Males. The Pearson correlation coefficient between self-acceptance and locus of control was .43 for males only (N=66). This coefficient is, of course, higher than what was found for the total group. A correlation of .43 (N=66) is statistically significant, and accounts for a much greater proportion of variance.

Females. The Pearson correlation coefficient between self-acceptance and locus of control was .10 for females only (N=68). This coefficient is lower than that obtained for the total group, and is not statistically significant.

Elementary Grade Levels. The Pearson correlation coefficient between self-acceptance and locus of control was .12 for the elementary grade levels (N=65). This coefficient is also lower than that obtained for the total group and is not statistically significant.

Middle Grade Levels. The Pearson correlational coefficient for the relationship between self-acceptance and locus of control was .33 for the middle grade levels (N=69). This coefficient is statistically significant, and somewhat meaningful in that variance. It accounts for about 11% of the common variance.

Hypothesis 2 pertained to the correlation between self-concept and locus of control. When this hypothesis was tested for all subjects it was found to be both statistically significant, and meaningful.

Males. The Pearson correlation coefficient between self-concept and internal locus of control was .55 for males only. This coefficient was higher than what was found for the total group. It is statistically significant with an r^2 of .30.

Females. The Pearson correlation coefficient between self-concept and internal locus of control was .21 for females only. This coefficient is not statistically significant and is below the coefficient found for the total group.

Elementary Grade Levels. The Pearson correlation coefficient between self-concept and internal locus of control was .19 for the elementary grades only. This coefficient is not statistically significant.

Middle Grade Levels. The Pearson correlation coefficient between self-concept and internal locus of control was .46 for the middle grade levels. The coefficient is statistically significant and meaningful and has an r^2 of .21.

Hypothesis 3 concerned the relationship between self-concept and self-acceptance. A Pearson correlation coefficient of .55 was found for the total group. This coefficient reached significance and accounted for 30% of the total variance.

Males. The Pearson correlation coefficient for males only was statistically significant ($r=.65$), with

self-acceptance determing 42% of the variance in the internal locus of control.

Females. The Pearson correlation coefficient for females was statistically (r=.42) significant and had an r^2 of .18 for the relationship between self-acceptance and internal locus of control.

Elementary Grade Levels. The Pearson correlation coefficient for the elementary grade levels was statistically significant (r=.48) and meaningful (r^2=.23) for the relationship between self-acceptance and internal locus of control.

Middle Grade Levels. The Pearson correlation coefficient for the middle grade levels was also statistically significant (r=.60) and meaningful (r^2=.36) for the relationship between self-acceptance and locus of control.

Part Two. Interactions between Grade Level and Sex of Subject for Each of the Dependent Variables

Because of the apparent patterns of the previously described correlations, it was believed that further exploration of the interactions of grade level and sex of subject for the dependent variables was warranted. For example, it has been noticed that for those relationships examined involving locus of control, there was a tendency for significant correlations to be found for males and the middle school grades but

not for females and the elementary school grades. The purpose of this part is to explore for possible sex by grade interactions within each dependent variable.

Sex by Grade for Self-concept. There was not a statistically significant main effect for grade on the self-concept measure ($F=2.9146$; $df=5, 122$; p .01). There was not a statistically significant main effect for sex on the self-concept measure ($F=1.4211$; $df=1, 122$; p .01). There was also not a statistically significant interaction of sex by grade for the self-concept measure ($F=0.8768$; $df=5, 122$; $p>.01$).

Sex by Grade for Self-acceptance. There was not a statistically significant main effect for grade on the self-acceptance measure ($F=2.0403$; $df=5, 122$; p .01). There was not a statistically significant main effect for sex on the self-acceptance measure ($F=0.7482$; $df=1, 122$; p .01). There was also not a statistically significant interaction of sex by grade for the self-acceptance measure ($F=1.6764$; $df=5, 122$; $p>.01$).

Sex by Grade for Locus of Control. A significant main effect was found for grade on the locus of control measure ($F=5.8140$; $df=5, 122$; p .01). This is the relationship discussed earlier as Hypothesis 4. No significant main effect was found for sex on the locus locus of control measure ($F=0.1159$; $df=1, 122$; $p>.01$).

No significant interaction was found for sex by grade on the locus of control measure ($F=2.2416$; $df=5, 122$; $p>.01$).

Multiple Correlation Analyses

The third section pertains to the multiple correlations (regression analyses) of the self-acceptance and locus of control scores on the self-concept scores. This analysis does not directly regard any of the hypotheses, but since it would shed further light on the dependent variables it was included in the results. Multiple regression coefficients can be interpreted in a manner similar to simple correlations. The advantage of multiple correlations is that they provide additional information in the form of the proportion of variance of one variable (e.g. self-concept) that can be predicted by other variables (e.g. self-acceptance and locus of control).

Table 4-2 shows the regression analysis of the data. The r values represent the correlations between self-acceptance and locus of control with self-concept. These values had previously been presented in support of Hypotheses 3 and 4. To some extent each of the other values show the relative influence of self-acceptance and locus of control on self-concept.

TABLE 4-2

MULTIPLE REGRESSION ANALYSIS FOR SELF-ACCEPTANCE AND LOCUS OF CONTROL ON SELF-CONCEPT FOR ALL SUBJECTS (N=134)

Variable: Self-concept	Simple r	Multiple R	Multiple R^2	Multiple R^2 Change	Beta Weight	F Value
Self-acceptance	.55081	.55081	.30339	.30339	.48176	44.077
Locus of Control	.38394	.60171	.36205	.05866	.25186	12.046

The multiple R shows that self-acceptance and self-concept correlate at the previously established coefficient of .55081. When self-acceptance is controlled and locus of control is added, the multiple R rises to .60171. The multiple R^2 then goes from .30339 (30%) to .36205 (36%) when self-acceptance is partialed. It is possible therefore to say that about 36% of the variance in self-concept scores can be accounted for by the total of the self-acceptance and locus of control scores taken together.

The respective Beta weights for self-acceptance and locus of control on self-concept were found to be .48176 and .25186. These Beta weights represent, in standard deviations, the expected change in one variable (self-concept) when the other variables (self-acceptance and locus of control) change one standard deviation. This assumes that the non-utilized predictor variable remains constant. The Beta weights are given in standard deviations or z-scores in order to enable them to have comparable means and variances. These Beta weights can be used with the data to form a prediction equation for variable Y. The higher a Beta weight the more influence it has in predicting the value of Y.

The sums of squares and mean squares for the total group were compared and the results confirmed that the relationships were statistically and meaningfully significant ($F=37.1729$; $df=2, 131$; p .01). The F value for self-acceptance by self-concept was 44.077 and the F value for locus of control by self-concept was 12.046. Both values are significant at the .01 level.

In general, for the two factors which have been examined and are seen as influencing self-concept, it appears as if self-acceptance is the predictor variable which is most highly related to self-concept. Locus of control can also be viewed as a significant predictor variable but as being less potent than self-acceptance. When viewed together, self-acceptance and locus of control account for about 36% of the total variance in self-concept.

Table 4-3 contains the regression data for males and females and for the elementary and middle grades. In each case the relative Beta weight for self-acceptance is higher than that for locus of control. More careful examination reveals tendencies which are related to the lower simple coefficients previously reported for females and elementary students for the correlations of locus of control with self-acceptance and self-concept. The Beta weights for females for both self-acceptance and locus of control on self-concept are lower than for males. The Beta weights for the

TABLE 4-3

MULTIPLE CORRELATIONS FOR SELF-ACCEPTANCE AND LOCUS OF CONTROL REGRESSED ON SELF-CONCEPT BY SEX AND GRADE OF SUBJECTS (N=134)

Subjects	Variable correlated with Self-concept	Multiple R	R^2	R^2 Change	Beta Weight
All Subjects (N=134)	Self-acceptance	.55081	.30339	.30339	.48176
	Locus of Control	.60171	.36205	.05866	.25186
Males (n=66)	Self-acceptance	.65351	.42707	.42707	.51133
	Locus of Control	.72022	.51872	.09164	.33445
Females (n=68)	Self-acceptance	.42071	.11700	.11700	.40369
	Locus of Control	.45209	.20438	.02739	.16636
Elementary (n=65)	Self-acceptance	.48197	.23229	.23229	.46586
	Locus of Control	.49853	.24854	.01624	.12847
Middle (n=69)	Self-acceptance	.59641	.35571	.35571	.49698
	Locus of Control	.65944	.43486	.07915	.29839

elementary grade levels for both self-acceptance and locus of control on self concept are lower than for the middle grades. For each grouping of subjects (females and the elementary grades) less of the total self-concept variance can be accounted for by self-acceptance and locus of control than for the other groupings of subjects (males and the middle grades).

Summary

The results of the data analysis were presented in three sections. The first section was directly aimed at testing the hypotheses. The second section was directed toward a more in depth exploration of the relationships between the dependent and independent variables. The third section was used to focus on the multiple correlations between the dependent variables.

Correlational techniques and one-way analyses of variance were used to determine the degree of relationship for the first nine hypotheses. The results were as follows:

1. Hypothesis one suggested a positive relationship between self-acceptance and locus of control. A low, but statistically significant, correlation of .27 was found.

2. Hypothesis two stated that a positive correlation existed between self-concept and locus of control. A statistically significant correlation of .38 was obtained.

3. Hypothesis three posited that a positive correlation would be found between self-concept and self-acceptance. The coefficient of .55 was determined to be statistically significant.

4. Hypothesis four contended that a positive relationship would be found between grade level and locus of control. An analysis of variance supported this contention.

5. Hypothesis five was included to determine the relationship between grade level and self-acceptance. The extent of the relationship was not deemed statistically significant.

6. Hypothesis six pertained to the relationship between grade level and self-concept. It was not found to be significant.

7. Hypothesis seven was directed at the relationship between sex of subject and locus of control. This relationship was not statistically significant.

8. Hypothesis eight sought to explore the relationship between sex of subject and self-acceptance. This relationship was not found to be significant.

9. Hypothesis nine was intended to explore the relationship between sex of subject and self-concept. This relationship was also not statistically significant.

The dependent variables (self-concept, self-acceptance and locus of control) were found to correlate with each other. Only in one case was a relationship found between the dependent variables and the independent variables. That was for the shift toward internality as the subjects progressed through school.

The second section was included to further explore the interactions of the variables. For the males and middle school subjects, the correlations were significantly higher than for females and elementary school students for the relationships between locus of control and both self-concept and self-acceptance. For all subgroupings of the subjects (i.e. grade and sex), significant correlations were found between self-concept and self-acceptance. Next, sex by grade interactions for each of the dependent variables were measured. No sex by grade interactions were found to be statistically significant for any of the dependent variables.

The third section pertained to the multiple correlations between the dependent variables. Locus of control and self-acceptance were regressed on self-concept. Beta weights of .48176 and .25186 were found for self-acceptance and locus of control, respectively. Their R^2 values went from .30 (self-acceptance alone) to .36 (when locus of control was added). That is, self-acceptance and locus of control together accounted for about 36% of the variance in self-concept. These results will be discussed in Chapter V.

CHAPTER V

SUMMARY AND CONCLUSIONS

In this chapter the previous theory and research along with the results obtained for this study are brought together in three parts. The first part is a summarization of the study with emphasis on the results. The second segment is a discussion of the conclusions and the third part includes implications and recommendations for future research.

Summary

The purpose of the study was to explore the relationships among the variables of self-concept, self-acceptance and locus of control in children and adolescents in grades 3 through 8. A review of the theoretical foundations of each of the variables revealed sufficient semblance to warrent further empirical investigation. That is, because of their apparent similarities, the variables shared enough commonality to expect that they would be related.

A review of the relevant literature revealed that: (1) self-concept and self-acceptance tend to be related to various personality characteristics, (2) students with an internal locus of control tend to

be better academic achievers, (3) self-concept and locus of control can be modified under certain conditions, (4) research with adults points to a positive correlation between self-acceptance and locus of control scores, and (5) there is little research in this area available pertaining to children and adolescents.

The major hypothesis was that a positive relationship exists between self-acceptance and locus of control for the subjects studied. This hypothesis and the others concerning the relationships among self-concept, self-acceptance and locus of control were correlational in nature. Further hypotheses were offered suggesting possible influences of grade level and sex of subject on self-concept, self-acceptance and locus of control. Previous research findings indicated that further research was necessary in these areas.

Subjects were 134 students (65 elementary and 69 middle school) from a midwestern urban school system. Of the subjects, 66 were males and 68 were females. The Piers-Harris Children's Self-Concept Scale, the Bledsoe Self-Concept Scale (self-acceptance) and the Nowicki-Strickland Locus of Control Scale were administered to all students. Correlational techniques, analysis of variance and multiple regression were used to analyze the data.

In the first section of the results the nine stated hypotheses were tested using correlation and analysis of variance and the following results were obtained:

1. There will be a positive correlation between self-acceptance (Bledsoe) and internal locus of control (Nowicki-Strickland) scores. Accepted ($r=.27$; $p<.01$).

2. There will be a positive correlation between self-concept (Piers-Harris) and internal locus of control (Nowicki-Strickland) scores. Accepted ($r=.38$; $p<.01$).

3. There will be a positive correlation between self-concept (Piers-Harris) and self-acceptance (Bledsoe) scores. Accepted ($r=.55$; $p<.01$).

4. There will be a positive relationship between grade level and internal locus of control (Nowicki-Strickland) scores. Accepted ($F=5.58$; $df=5, 128$; $p<.01$).

5. There will be a relationship between grade level and self-acceptance (Bledsoe) scores. Rejected ($F=1.99$; $df=5, 128$; $p>.01$).

6. There will be a relationship between grade level and self-concept (Piers-Harris) scores. Rejected ($F=2.92$; $df=5, 128$; $p>.01$).

7. There will be a relationship between sex of subject and locus of control (Nowicki-Strickland) scores. Rejected ($F=0.12$; $df=1, 128$; $p>.01$).

8. There will be a relationship between sex of subject and self-acceptance (Bledsoe) scores. Rejected ($F=0.75$; $df=1, 128$; $p>.01$).

9. There will be a relationship between sex of subject and self-concept (Piers-Harris) scores. Rejected ($F=1.72$; $df=1, 128$; $p>.01$).

The dependent variables (self-concept, self-acceptance and locus of control) were found to correlate positively with each other. A relationship was found between a dependent variable and an independent variable in only one case, which was for the shift toward internality as the subjects progressed through school.

The second section was included to further explore the interactions among the variables. The correlations between locus of control and both self-concept and self-acceptance were significantly higher for the males and middle school subjects than for females and elementary school students. For all subgroupings of the subjects (i.e. by sex and grade) significant correlations were found between self-concept and self-acceptance. No statistically significant sex by grade level interactions were found for any of the dependent variables.

The third section pertained to the multiple correlations among the dependent variables. Locus of control and self-acceptance were regressed on self-concept. Beta weights of .48 and .25 were found for self-acceptance and locus of control respectively. Their R^2 values increased from .30 (self-acceptance alone) to .36 (when locus of control was added). In other words, the combination of self-acceptance and locus of control accounted for approximately 36% of the total variance in self-concept.

Conclusions and Discussion

In earlier chapters it was suggested that further study of self-concept, self-acceptance and locus of control was warranted. The results indicate that, for children, positive relationships exist among the variables. These results will be discussed in light of previous theory and research.

Self-acceptance and Locus of Control

A statistically significant correlation was found for the relationship between self-acceptance and locus of control. A moderate amount of the variance of locus of control can be predicted from self-acceptance and vice-versa. This finding is consistent with the previous adult research findings of Lombardo et al. (1975).

When the number of factors which contribute to the variances of self-acceptance and locus of control are considered, a magnitude of relation of 7% can be perceived as being more meaningful. Theoretical and empirical writings had suggested strongly that factors such as self-acceptance and internal locus of control are related to other common factors. Generally, they have been associated with factors which fall within the domains of "well adjusted" or "competent".

Competence is an attribute which begins to develop early and is subject to developmental trends.

Burton White (1975) related competence to attributes in child-rearing practices for two- to three-year olds. White suggested child-rearing practices which are intended to encourage the following types of behaviors in children: (1) getting and holding the attention of adults, (2) using adults as resources having first determined that no job is too difficult, (3) expressing affection and moderate annoyance to adults, (4) leading and following peers, (5) expressing affection and mild annoyance to peers, (6) competing with peers, and (7) having the ability to anticipate consequences (White, 1975, pp. 200-211). Conceptually, such notions appear related to the development of both self-acceptance and locus of control. The components of self-acceptance and locus of control, therefore, appear to cluster within the domain of competence. To become competent one must perceive himself as (a) being like the person he would like to be and (b) being able to exert control over the important contingencies in his life. Consequently, simultaneous increases in both self-acceptance and locus of control tend to occur in competent individuals.

Locus of control may have a mediating effect on self-acceptance. That is, if one is not like the person he or she would like to be, there is a self-saving tendency to attribute control for the important

contingencies in one's life to externally controlled factors. Conceptually, the growing child says, "I'm not who I want to be, but it is because things tend to be beyond my control." It is equally plausible to assume that those children who have actually had more negative experiences which were beyond their control would be low in self-acceptance. Internal control over significant life events is probably a necessary element in becoming the person one would ideally like to be. However, it is further possible that a child or adolescent who is high in self-acceptance would find it more satisfying to perceive herself as being responsible for that success. Until further causal analysis can be performed it seems reasonable to view the relationship between self-acceptance and locus of control as being mutually reinforcing.

Further analysis revealed that the statistically significant relationship between self-acceptance and locus of control for children was supported for males and middle grade level students, but not for females and elementary-aged children. For both the males and the middle grade students self-acceptance accounted for much more common variance. It is possible that younger students and females have not yet developed to the point where real and ideal self-concepts or perceptions of locus of control have been consolidated. An alternate

explanation might be that, due to differential age and sex role expectations, the relationship between self-acceptance and locus of control is not as strong for elementary aged students and females. Males and middle school students might be expected to know more of what they want from life (ideal self) and a clearer perception of their chances for attaining their goals (real self and locus of control). Messler (1972) suggested that sex role expectations influence the manners in which boys attribute credit and girls accept failure in certain situations. For younger children, practically everything is more outside of their control. They are generally more dependent on adult caregivers for physical needs such as food and shelter. Social and emotional needs are also more controlled by adults for elementary than for middle school aged children. Boys, more than girls, have been traditionally allowed greater control over the important contingencies in their lives. Exposure to attitudes in which males and older children are ascribed roles which are more conducive to increased self-acceptance and internal locus of control could account for the sex and age differences which were found to exist in the sample studied.

A positive relationship was found between self-concept and internal locus of control. Sufficient common variance exists (r^2=14%) to make meaningful

predictions from the values of each variable. Previous research had generally supported the presence of a self-concept and locus of control relationship for both adults (Feather, 1967; Fish & Karabenick, 1971; Heaton & Duerfeldt, 1973, and Lombardo, Fantasia & Solheim, 1975) and children (Beebe, 1970 and Milgram & Milgram, 1976).

Self-concept, self-acceptance and locus of control are self-perceptions. Consequently, each is subject to influence by life experiences. Gilmor's (1978) review of the "adaptive behavior" correlates of locus of control identified the following experiences determined to be mediators of control expectancies: socioeconomic status, age, emotional stability, various physically handicapping conditions, creativity, academic achievement, parent-child interactions and family characteristics. As previously suggested, the determinants of locus of control and self-concept (and probably self-acceptance) share much in common. For example, high socioeconomic status has been related to high self-concept, increased self-acceptance and more internal expectancies of locus of control. In general, each factor contributes to viewing one's self as being competent. Such life experiences influence self-concept, self-acceptance and locus of control in a manner that results in somewhat parallel development. Sex and age apparently effect the parallelism.

Common factors (such as self-acceptance and perceived academic achievement) also contribute to these variables. They are also related to factors which fall within the "competence" domain. The perception of exerting control over the contingencies in one's life would tend to enhance self-concept and vice-versa. Competency and control become increasingly linked as children develop.

When the subjects were separated by sex and grade level, differences in the correlations between self-concept and locus of control were quite similar to those obtained for self-acceptance and locus of control. That is, significant correlations were found for males and middle school students, but not for females and elementary students. Again, differences in stage related development along with age and sex role expectations are offered as possible explanations. That both self-concept and self-acceptance would relate in such a similar manner suggests that they share much in common.

Self-concept and Self-acceptance

A positive correlation was obtained for the relationship between self-concept and self-acceptance. It was both statistically ($r=.55$) and meaningfully ($r^2=.30$) significant. Since about 30% of the variance from one can be used to predict values on the other, it supports the suggestion offered above that they share

much in common. This is theoretically consistent, since self-concept is one of two conceptually related factors (self-concept and ideal self-concept) used to determine self-acceptance. These factors are not mutually exclusive. When ideal self-concept is held constant or its effects are partialed out, an increase in perceived self-concept should result in a corresponding increase in self-acceptance. All correlations were found to be statistically and meaningfully significant when the students were grouped by grade level and sex.

McCandless (1967) had suggested that self-concept and self-acceptance would be related since these two variables are conceptually similar. Psychological correlates mentioned by McCandless as being related to positive self-concept and self-acceptance included: increased perceptions of security, better emotional adjustment, less depression and less anxiety.

If a person thinks highly of his or her self, that person is probably more like the person he or she would like to be. In a positive sense, the person seems to be saying, "I am like the person I would like to be and I am good." In a negative sense, the person says, "I am not who I want to be and I am not so good." It is difficult to have a positive perception of one's self when there is a lack of congruence between one's real and ideal self-images.

Locus of Control and Grade Level

As expected, a shift toward internality was detected as students progressed through school. This shift has commonly been found as students grow older (see page 69). As students grow, become more knowledgeable and pass through developmental stages, they are accorded more responsibility, perceive more cause-effect contingencies, and mature both physically and psychologically. The result is increased opportunities for internal control and increased opportunities for perceiving themselves as being in internal control. Our legal and moral systems encourage this shift toward internal control with age.

Self-acceptance and Grade Level

A trend toward becoming more self-accepting as students grew older was not found. The rationale that more "realistic" goals are formed by the older students resulting in greater self-acceptance was not supported. Apparently students do not automatically adjust their real and ideal selves to decrease their discrepancies. Both real and ideal self-concepts have apparently jelled sufficiently to allow groups of children and adolescents to pass through the grade levels studied without significant changes in their relative levels of self-acceptance. Of course, it remains

possible that individuals might show strikingly different levels of self-acceptance through time. These findings lend some credence to the notion that important personality attributes (such as self-acceptance) are pretty much formed in earlier years and remain stable in these later years. Apparently the shift toward a more internal locus of control is not enough to cause adolescents to feel that they can close the gap between their real and ideal self-concepts. Perhaps concerns related to physical maturation interfere with the expected changes in self-acceptance during this age span. It may be difficult to "accept" what is still in the process of change. In the review of literature evidence of self-acceptance changes during these years could not be substantiated.

Self-concept and Grade Level

The results provided further evidence that level of self-concept also remains relatively consistent for groups of subjects for the grade levels studied. Interest in such differences goes back to the original study by Piers and Harris (1964) using the self-concept scale. They found differences within the extremes of their grade levels. Scores from third and tenth graders tended to be higher than for sixth graders. Such maturational influences as increased responsibility,

increased intellectual ability and greater body size apparently have less effect on self-concept and self-acceptance than on locus of control.

One explanation for the apparent lack of change could be the previously mentioned interference by factors associated with physical maturation. A more plausible explanation is that children and adolescents' self-concepts are moderated by the fact that they measure themselves relative to their peers. Although they are more responsible, more in control, smarter and larger, so too, are all of their friends and classmates. During this time, who one is tends to be less important than what one seems to be when compared to peers. To some extent, self-perceptions do not seem to have the potency that peer-perceptions do in forming self-concept and self-acceptance.

Sex and Self-concept, Self-acceptance and Locus of Control

None of the one-way analyses of variance for sex by the dependent variables (self-concept, self-acceptance or locus of control) was statistically significant. Consequently, none of the final three hypotheses dealing with such relationships were upheld. This is consistent with previous research for both subjects within the age groups studied and for those

studies which used measures of generalized locus of control.

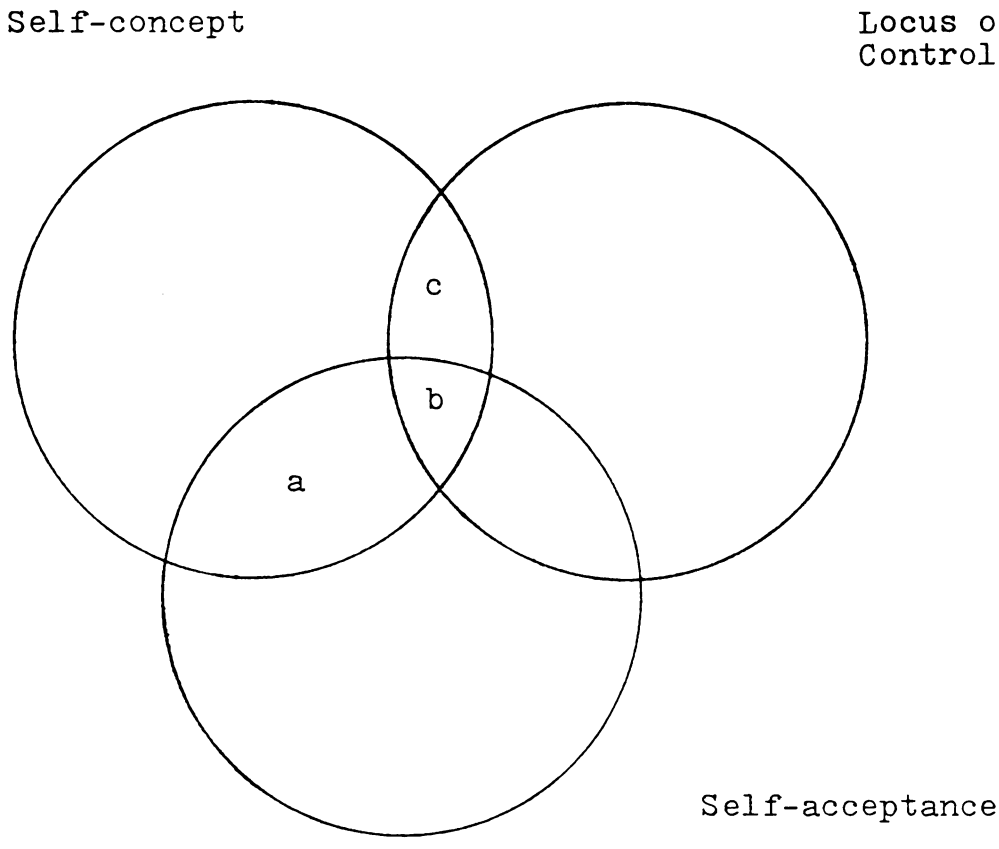
Regression Analysis of Self-concept, Self-acceptance and Locus of Control

As a further analysis of the relationships among variables, the data related to self-concept, self-acceptance and locus of control was subjected to a regression analysis. The multiple correlations of self-acceptance and locus of control were regressed on self-concept. This analysis was performed in order to determine the proportion of variance of one variable (self-concept) that can be predicted by the other variables (self-acceptance and locus of control).

It was found that approximately 36% of the variance in self-concept scores was accounted for by the total of the self-acceptance and locus of control scores taken together. Roughly twice the original variance in self-concept can be accounted for by self-acceptance than by locus of control. In short, self-acceptance is a better predictor of self-concept than is locus of control. Locus of control can be viewed as a significant predictor of self-concept but as being some what less potent than self-acceptance. This is illustrated in Figure V-1.

FIGURE V-1

Representation of the Relative Predictive Power of Self-acceptance and Locus of Control for Self-Concept



Self-acceptance alone (a+b) accounts for 30% of the variance in self-concept.

Locus of control alone (b+c) accounts for 14% of the variance in self-concept.

Self-acceptance and locus of control together (a+b+c) account for 36% of the variance in self-concept.

There are conceptual and operational reasons why self-acceptance contributes more to the variance of self-concept than does locus of control. Self-acceptance is defined as the discrepancy between one's real and ideal self-concept. Different measures were used to determine self-concept (Piers-Harris) and self-acceptance (Bledsoe) in order to reduce possible confounding. Yet, the variables are sufficiently similar to allow overlap. Reasons for the similarities have been discussed in this chapter and in the review of literature. The feelings and perceptions necessary to have a high self-concept resemble those associated with high self-acceptance. To a lesser degree qualities associated with locus of control are like--or contribute to--those of self-concept.

Self-concept, self-acceptance and locus of control have been related to common influences, such as parenting styles and academic achievement. Locus of control is less related to self-concept than is self-acceptance because locus of control is determined by more independent influences. Such influences are specific to the whole notion of control, such as perceptions of cause-effect contingencies.

Whereas both self-concept and self-acceptance are more dependent on evaluative perceptions relative to one's norm group, locus of control is subject to

increasing control over contingencies as one develops. Locus of control includes more factors outside of the self-concept domain. For example, persons such as alcoholics, with low self-concepts or low self-acceptances might feel as if they are quite in control of their lives. Others with high self-concepts or high self-acceptances, like some terminally ill persons or prisoners, might well have external loci of control. Locus of control is a contributing factor to self-concept development, but self-acceptance appears to be a more closely related and necessary factor in self-concept development.

Further analysis showed that whether subjects were grouped either by sex or by grade level the results remained essentially the same. For every subgrouping, self-acceptance was found to be a better predictor of self-concept than was locus of control.

Implications and Limitations

The present investigation suggests that the causal ties between self-concept and self-acceptance will probably be tighter than those between self-acceptance and locus of control. The causal direction and magnitude would be of interest to persons interested in human development. The practical implication is that people concerned with development of self-concept, self-acceptance and locus of contol consider the interrelationships of these variables. The stage is set to examine the directional influence of these variables on each other.

Regarding limitations, there is a need for better and more specific instruments to measure personality variables. Ideally, studies such as this should include three measures of each dependent variable. This practice would help assure increased reliability and validity. It is suggested that measures designed to examine multidimensional aspects of each variable be used to provide more detailed perspectives of the relationships. Another limitation pertains to the generalizability of the results. A sample was chosen which was perceived as being as representative as possible of the general population. Yet, the extent to which the results can be generalized to other populations (such as specific racial groups, SES catagories or rural populations) is limited. It is recommended that future studies be designed to remediate these limitations. Another limitation is in the inherent nature of the definitions of self-concept and self-acceptance--and perhaps locus of control.

Suggestions for Future Research

The present study indicates that self-concept, self-acceptance and locus of control are positively correlated for children and adolescents, which raises many questions for further research. What is it about each of the variables that causes them to be related? Do the relationships exist for different populations? Although the present research is more theoretical than practical in nature, it raises questions that have implications for educators and psychologists. Since the variables self-concept, self-acceptance and locus of control are related

to both academic performance and personal competence, will changes in these variables lead to corresponding change in academic performance and competence? Further research in which the relevant variables are controlled or manipulated is indicated. Replication of studies in which causal influences and other important variables appears to be warranted. Stipek's (1980) research suggesting that locus of control contributes directly to academic achievement is a step in that direction. Recent statistical advances in path analytic techniques will further this cause.

Self-concept, self-acceptance and locus of control are valued attributes in and of themselves. Perhaps directions of influence can be determined between those attributes and other variables and other variables, If so, is it possible that a systematic manipulation of relevant life experiences could lead to corresponding changes in attributes associated with these other valued attributes?

Perhaps the least expected aspect of the study was the finding that for males and middle school children the relationships between self-concept, self-acceptance and locus of control were more highly correlated than for females and elementary age children. This apparent tendency should be explored further. Whether this tendency is a spurious result of the sample examined or an actual consistent tendency among children and adolescents should be investigated. Implications for sex-role development exists. Again, causal attributes associated with this tendency should

be examined. Further research is warrented to probe the increase in internality as children mature. Larger and more varied samples are indicated.

Further theoretical examination of the variables is in order. Wilie (1979) has made such an effort for self-concept. The trend seems to be moving away from the critical framework of the 1960s and early 1970s and toward a more constructive, yet cautiously creative, attitude going into the 1980s. Because of recent attitudes toward viewing self-acceptance as a viable construct (especially as real and ideal discrepancies) that notion seems deserving of re-examination. Despite the enormous interest and proliferation in the area, much remains to be resolved pertaining to locus of control, especially regarding the dimensionality questions, behavioral correlates, and various conceptual frameworks.

APPENDIX A

PARENT PERMISSION LETTER
(Photographically Reduced)

APPENDIX A

PARENT PERMISSION LETTER

1601 Wintercrest
East Lansing, MI
48823

Dear Parents:

I am a doctoral candidate at Michigan State University in Educational Psychology. One essential aspect of my program is that I engage in a research project to satisfy the dissertation requirements of the degree. I am asking for your help by allowing your child to take part in my research project.

The nature of the research is to determine the relationship between the variables self-concept, self-acceptance, locus of control, and academic achievement. Self-concept pertains to how people perceive and feel about themselves. Self-acceptance refers to the degree to which people's self-concepts are like how they would ideally want them to be. Locus of control has to do with whether people see their lives as being controlled by their own doings or by forces outside of their control. Academic achievement is how a student is doing in school compared to other students.

The scales used to measure the variables consist of short statements to which the students will be asked to circle either "yes" or "no" depending on how they feel the statement describes their feelings and perceptions. A small portion (14 of the 180 statements) refer to children's perceptions of family relationships. Examples include:

1) Do you feel that most of the time parents listen to what their children have to say? . . yes no
2) Do your parents usually help you if you ask them to? . . . . . yes no
3) I am an important member of my family . yes no
4) My parents expect too much of me . . . yes no
5) I like my brother (sister) . . . . . yes no.

Family relationships play such an important part in forming our personalities that most, if not all, such scales contain such statements. It was felt that you should informed that I will be doing this research and that some questions will pertain to children's perceptions of family relationships.

All responses will be treated in complete confidentiality. Neither the school nor I will know the identity of those students taking part. No experimental manipulation will occur. This is a one-shot study which will take a total of about 30 minutes of class time. If you have any questions, call me collect at 517/351-4123. The higher the percentage of parents who allow their children to take part, the more meaningful the results will be. Please sign below and return this letter to your child's teacher if you want your child to be a part of the study.

Yours truly,

Curt Legg

Curt Legg

I GIVE PERMISSION FOR MY CHILD (name)_____ TO TAKE PART IN THE STUDY DESCRIBED ABOVE.

(signed) _____

Please respond as soon as possible.

APPENDIX B

BLEDSOE SELF-CONCEPT SCALE

(Photographically Reduced)

APPENDIX B

BLEDSOE SELF-CONCEPT SCALE

SELF-CONCEPT SCALE

There is a need for each of us to know more about what we are like. This is to help you describe yourself and to describe how you would like to be. There are no right or wrong answers; each person may have different ideas. Answer these according to your feelings. It is important for you to give your own honest answers.

Think carefully and check the answer that tells if you are like the word says Nearly Always, About ½ the Time, or Just Now and Then. In the second column check the answer if you would like to be like the word says Nearly Always, About ½ the Time, or Just Now and Then.

THIS IS THE WAY I AM				THIS IS THE WAY I'D LIKE TO BE		
Nearly Always	About ½ the Time	Just Now and Then		Nearly Always	About ½ the Time	Just Now and Then
____	____	____	Friendly	____	____	____
____	____	____	Cold	____	____	____
____	____	____	Brave	____	____	____
____	____	____	Small	____	____	____
____	____	____	Helpful	____	____	____
____	____	____	Honest	____	____	____
____	____	____	Cheerful	____	____	____
____	____	____	Active	____	____	____
____	____	____	Jealous	____	____	____
____	____	____	Quiet	____	____	____
____	____	____	Strong	____	____	____
____	____	____	A good sport	____	____	____
____	____	____	Mean	____	____	____
____	____	____	Lazy	____	____	____
____	____	____	Poor	____	____	____
____	____	____	Smart	____	____	____
____	____	____	Popular	____	____	____
____	____	____	Useful	____	____	____
____	____	____	Clean	____	____	____
____	____	____	Kind	____	____	____
____	____	____	Selfish	____	____	____
____	____	____	Dull	____	____	____
____	____	____	Healthy	____	____	____
____	____	____	Timid	____	____	____
____	____	____	Slow	____	____	____
____	____	____	Faithful	____	____	____
____	____	____	Lonely	____	____	____
____	____	____	Polite	____	____	____
____	____	____	Talkative	____	____	____
____	____	____	Happy	____	____	____

APPENDIX C

THE NOWICKI-STRICKLAND PERSONAL REACTION SURVEY

(Photographically Reduced)

APPENDIX C

THE NOWICKI-STRICKLAND PERSONAL REACTION SURVEY

We are trying to find out what boys and girls your age think about certain things. We want you to answer the following questions the way you feel. There are no right or wrong answers. Don't take too much time answering any one question, but do try to answer them all.

1. Do you believe that most problems will solve themselves if you just let them? . . . . . yes no
2. Do you believe that you can stop yourself from catching a cold? . . . . . yes no
3. Are some kids just born lucky? . . . . . yes no
4. Most of the time do you feel that getting good grades means a great deal to you? . . . . . yes no
5. Are you often blamed for things that just aren't your fault? . yes no
6. Do you believe that if somebody studies hard enough he or she can pass any subject? . . . . . yes no
7. Do you feel that most of the time it doesn't pay to try hard because things never turn out right anyway? . . . . . yes no
8. Do you feel that if things start out well in the morning that it's going to be a good day no matter what you do? . . . yes no
9. Do you feel that most of the time parents listen to what their children have to say? . . . . . yes no
10. Do you believe that wishing can make good things happen? . . . yes no
11. When you get punished does it usually seem it's for no good reason at all? . . . . . yes no
12. Most of the time do you find it hard to change a friend's mind or opinion? . . . . . yes no
13. Do you think that cheering more than luck helps a team to win? . . . . . yes no
14. Do you feel that it's nearly impossible to change your parent's mind about anything? . . . . . yes no
15. Do you believe that your parents should allow you to make most of your own decisions? . . . . . yes no
16. Do you feel that when you do something wrong there's very little you can do to make it right? . . . . . yes no

17. Do you believe that most kids are just born good at sports? . yes no

18. Are most of the other kids your age stronger than you are? . . yes no

19. Do you feel that one of the best ways to handle most problems is just not to think about them? . . . . . yes no

20. Do you feel that you have a lot of choice in deciding who your friends are? . . . . . yes no

21. If you find a four leaf clover do you believe that it might bring you good luck? . . . . . yes no

22. Do you often feel that whether you do your homework has much to do with what kind of grades you get? . . . . . yes no

23. 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 no

24. Have you ever had a good luck charm? . . . . . yes no

25. Do you believe that whether or not people like you depends on how you act? . . . . . yes no

26. Will your parents usually help you if you ask them to? . . . . yes no

27. Have you felt that when people were mean to you it was usually for no reason at all? . . . . . yes no

28. Most of the time, do you feel that you can change what might happen tomorrow by what you do today? . . . . . yes no

29. 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 no

30. Do you think that kids can get their own way if they just keep trying? . . . . . yes no

31. Most of the time do you find it useless to try to get your own way at home? . . . . . yes no

32. Do you feel that when good things happen they happen because of hard work? . . . . . yes no

33. Do you feel that when somebody your age wants to be your enemy there's little you can do to change matters? . . . . . yes no

34. Do you feel that it's easy to get friends to do what you want them to? . . . . . yes no

35. Do you usually feel that you have little to say about what you get to eat at home? . . . . . yes no

36. Do you feel that when someone doesn't like you there's little you can do about it? . . . . . yes no

37. Do you usually feel that it's almost useless to try in school because most other children are just plain smarter than you? . . . . . yes no

38. Are you the kind of person who believes that planning ahead makes things turn out better? . . . . . yes no

39. Most of the time, do you feel that you have little to say about what your family decides to do? . . . . . yes no

40. Do you think it's better to be smart than to be lucky? . . . . yes no

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