A correlational study between the Adolescent and Adult Self Concept Retrospective Scale and the Inferred Rating Scale

Patricia A. Coley
Rowan University

Follow this and additional works at: https://rdw.rowan.edu/etd

Part of the Educational Psychology Commons

Let us know how access to this document benefits you - share your thoughts on our feedback form.

Recommended Citation
Coley, Patricia A., "A correlational study between the Adolescent and Adult Self Concept Retrospective Scale and the Inferred Rating Scale" (1999). Theses and Dissertations. 1781.
https://rdw.rowan.edu/etd/1781

This Thesis is brought to you for free and open access by Rowan Digital Works. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Rowan Digital Works. For more information, please contact LibraryTheses@rowan.edu.
A CORRELATIONAL STUDY BETWEEN THE ADOLESCENT AND ADULT SELF CONCEPT RETROSPECTIVE SCALE AND THE INFERRED RATING SCALE

by

Patricia A. Coley

A THESIS

Submitted in partial fulfillment of the requirements of the Master of Arts Degree of the Graduate School at Rowan University
May, 1999

Approved by

Date Approved 5/6/99
ABSTRACT

Coley, Patricia

A Correlational Study Between the Adolescent and Adult Self-Concept Retrospective Scale and the Inferred Rating Scale, 1999, Advisor: Dr. John Klanderman, School Psychology

If it is to believe that self-concept can be inferred from behavior, that an individual perceives himself based upon how others see him and behaves according. Then it can be assumed that the development of one’s self-concept can be influenced by significant individuals such as teachers, school counselors and school administrators.

It is noted that students with negative self-concepts may become high risk for learning problems. The self-concept can predict academic success or failures.

This study will look at 30 students classified Learning Disabled from a South Jersey High School, and how they perceive themselves compared with the teacher’s perception of how they see themselves. It was hypothesized that there will be a positive correlation between the total raw scores of each scale. This is a test for Validity for the Adolescent and Adult Self-Concept Retrospective Scale. The study showed that there was a significant positive relationship between the two self concept scales.
MINI-ABSTRACT

Coley, Patricia  A Correlational Study Between the Adolescent and Adult
Self-Concept Retrospective Scale and the Inferred Rating
Scale, 1999, Advisor: Dr. John Klanderman, School
Psychology

The purpose of this study is to test for validity for the revisions of the Adolescent
and Adult Self-Concept Retrospective Scale (AASRS). The subjects include 30
classified Learning Disabled students from a South Jersey high school. Total raw scores
from the ASSRS are compared with the total raw scores from the Inferred Rating Scale.
The results showed that there was a significant positive relationship between the two
scales.
Acknowledgments

The author gratefully acknowledges the assistance and encouragements of several people, who helped and made it possible to conduct and complete this study.

To Dr. John Kanderman, my advisor, for his support, assistance and encouragement.

To Dr. Roberta Dihoff for always being available and Vicky Isler for her assistance with Chapter 4.

I also would like to thank my family whose love and encouragement gave me the inspiration to continue my education and pursue my goals.

Finally, I would like to thank my husband, for his prayers, love, and support. For this reason, I am deeply thankful.
# Table of Contents

ACKNOWLEDGMENT ....................................................... i
TABLE OF CONTENTS .................................................... ii

CHAPTER

1. THE PROBLEM .................................................................. 1
   The Purpose of the Study ................................................ 2
   The Need for the Study .................................................. 3
   The Hypothesis .......................................................... 3
   The Theory ............................................................. 3
   History of Self Concept ............................................... 4
   Definition of Terms .................................................... 8
   Assumptions ............................................................ 9
   Limitations .................................................................. 9
   Overview ..................................................................... 10

2. LITERATURE REVIEW ................................................. 12
   Academic Self-Concept ................................................. 12
   Multidimensional Self-Concept ..................................... 14
   The Self-Concept and the Learning Disabled .................... 15
   Self-Concept and Mathematics Performance ................... 17
   Gender Differences in Self-Concept and Academic Performance ................................................. 18
   Gender Difference in Academic Achievement .................. 19
   Self-Concept and Academic Achievement ....................... 21
   Summary ..................................................................... 23

3. METHODS .................................................................... 24
   Sample ....................................................................... 24
   Subjects ...................................................................... 24
   Measures ..................................................................... 25
   Setting ........................................................................ 25
   Test Procedure .......................................................... 25
   Design ........................................................................ 26
   Testable Hypothesis .................................................... 26
   Summary ..................................................................... 26

4. ANALYSIS OF RESULTS .............................................. 27
   Table I - Correlations (Pearson Correlation) – 2 – tailed .......................................................... 28
   Figure I - Joseph Self-Concept and Inferred Rating Scale ......................................................... 29
   Summary ..................................................................... 30
   Figure II - Scores by Gender and Race ..................................................................................... 31
   Figure III - Self-Concept Scores by Gender and Race ............................................................... 32
5. SUMMARY AND CONCLUSION ............................................ 33
Discussion .......................................................... 34
Limitations ......................................................... 34
Implications .......................................................... 34

REFERENCES ......................................................... 36
CHAPTER I

THE PROBLEM

"I Think Therefore I am"
(Rene Descartes)

"Who am I?" a familiar question that has plagued the minds of many, since the beginning of time.

Understanding one’s self remains a formidable task, particularly for adolescents, when one’s identity is formulated (Erikson 1968). In the words of Erikson, adolescents and adults with a strong sense of their own identity see themselves as separate, distinct individuals. This gives a sense of self-consistency and wholeness, as compared with younger children who, in order to experience wholeness, must feel a progressive continuity between that which he has come to be during the years of childhood and that which he promises to become in the future. In other words, adolescents have a much more sophisticated view of what is involved in a sense of self than younger children. Younger children tend to be more concrete in their self description than adolescents, who tend to be more abstract. Adolescents also include psychological characteristics, interpersonal relationships, self-evaluations and conflicting feelings as part of their self description (Harter, 1983). Self-conceptions are more differentiated and better organized during adolescence.
The self-concept has been given great attention within the last decade. Many personality theorists believe the notion of how one perceives oneself can greatly influence one’s ability to be successful in various areas of one’s life, such as socio-emotional development, interpersonal relationship and, academic achievement.

However, much of the attention within the last decade has centered and or has been developed for pre-school or elementary age children.

This study will focus on the self-concept of 30 high school adolescents who are classified learning disabled. Two self-concept measurement tools will be used. One will be the Joseph’s Adolescent and Adult Retrospective Self-Concept Scale (The Revised Adult Version) and the other, The Inferred. Rating Scale. According to Erickson, a sense of self requires psychosocial reciprocity, which is defined as, a consistency between that which he conceived himself to be and that which he perceived others to see in him and expect in him (Erikson, 1959).

Teachers’ perceptions can play an important role in how a student sees himself, especially in the school and academic realm.

THE PURPOSE

The purpose of this study was to test for validity of the Joseph Adolescent and Adult Self Concept Retrospective Scale (AASRS). This was done by comparing the AASRS total raw scores with the Inferred Rating Scale, total raw scores. This study used 30 special education students who have various learning disabilities, who are placed within three academic programs. The three academic programs are as follows, self-contained, inclusion and departmentalized as defined by Chapter 28 New Jersey Administrative Code and Lower Camden County School District.
THE NEED

The need for this study is in determining the significance self-concept has on academic performance and learning abilities. Educators, parents, child study teams and those providing special services to those students who fall under the category of learning disabled, may benefit by understanding how behaviors are influenced by how one defines and perceives oneself. The concept of this study can provide additional background information in providing students who may need further psychological, academic or clinical evaluations.

HYPOTHESIS

The hypothesis for this study is that there will be positive correlations between the Inferred Rating Scale and the Adolescent and Adult Self-Concept Retrospective Scale.

Research Questions:

This study will also attempt to examine the following questions as the whether male adolescents score higher on self-concept than female adolescents.

THEORY

“Know Thyself” (Socrates)

“Know Thyself” is an inscription carved on the shrine of the Delphic Oracle in Ancient Greece. This famous saying by Socrates stemmed from his belief that the importance of how we feel and perceive ourselves is important in our full understanding of human personality. For centuries there have been many attempts to determine the relevancy of how the self-concept influences academic abilities, performances attitudes and other behaviors.

In this section we will look at a chronological history and various theories of the self-concept.
HISTORY OF SELF CONCEPT

The earliest accounts of the concept of the self can be explored prior to the 20th century beginning with Plato and Socrates, two ancient Greek philosophers who equated the self with metaphysical concepts of “soul will” or spirit. The self is considered an immaterial entity and spiritual in nature. As expressed in the above quote.

During the 16th century Descartes saw the self as two separate but interrelated beings a dualism of mind and body.

The forerunners in self theory research has been from the humanistic point of view. The Humanist views the self as the irreducible unit out of which the coherence and stability of the personality emerges.

William James in 1980 identified three components of self: the material me (bodily self), the social me (one’s awareness of how other’s perceive them) and the spiritual self (private thoughts and feelings).

John Locke in the 17th century believed the essence of the self is consciousness. Consciousness is inseparable from thinking, and only experiences that are recalled become part of the self.

Hume, a forerunner during the eighteenth century believed the self as not a person, but a cluster of perceptions, ideas, and experiences.

Kant, also during the eighteenth century saw our knowledge of self develops from knowledge and/or awareness of the outer senses, physical objects such as our own body.

William James, also believed that the self is comprised of four intricate elements. The first element is the spiritual self, which relates to thinking and feeling. The second element is the social self, which relates to acquaintances with individuals or groups whose opinion we value
and respect. The third is the **material self**, which consist of materials such as clothing and possessions that makes us, us. The last is the **bodily self**, which is concerned with body image. James, conclude that the selves were combined to form a hierarchy pyramid with bodily self at the bottom, social self middle, spiritual self at the top, bodily self right below social self, and above material self.

Satre in 1965 used an existentialist point of view and believed the self to have an active conscious, but the self is a process, a continuation of growth and development.

Laing during the Late 1960's argues that the self develops by how others perceive us and how we perceive others. The creating of false selves can lead to abnormal behaviors such as schizophrenics.

Sigmund Freud's infamous Personality Theory is centered around the ego which can be synonymous with self. He saw the ego as a conscious part of the personality having powers to provide balance between the Id and the Superego.

Carl Jung believes the self-concept develops during middle age, after the personality is fully developed.

Neo Freudians, such a Alfred Adler and Karen Horney believe that social contacts and experiences play important roles in self-concept development. They also give credit to individual perceptions of the external world when forming a sense of self.

The most influential in the area of self-concept theory is Carl Rogers. In Roger's view the self is the central root of the personality. He sees the self as a social product, constantly aiming for consistency. There must be consistency between the actual and ideal self, rather than
between parts of personality traits, actions past or present, aspects of functioning (Zimbardo, 1985).

Perception of self, perception of other, future expectation and the interpretation of others perception of one, explores Rogers’ viewpoint. Carl Rogers offered the following definition of the self-concept (Rogers, 1951).

The self-concept or self structure may be thought of as an organized configuration of perception of the self which are admissible to awareness. It is composed of such elements as the perception of one’s characteristics and abilities, the percepts and concepts of self in relation to others and the environment, the value quantities which are perceived as associated with experiences and objects and goals and ideas which are perceived as having positive or negative valance.

According to Carl Rogers’ definition we have six important elements or components that are refined below:

1. **Personal self concept** - This refers to one’s personal account of how one sees oneself or how one may describe oneself in terms of physical or behavioral attributes or characteristics such as eye color, how tall one is, age, gender, racial/ethnic identity, economic and social class standing.

2. **Social self-concept** - How one thinks they are perceived by others.

3. **Self-ideals regarding one’s personal self-concept** - How one would wish to be like.

4. **Self-ideals regarding one’s social self-concepts** - These are how one would like others to see one.
5. Evaluations of descriptive personal self-conceptions in relation to the ideals for self regarding those attributes - Evaluation of one’s personal description of physical attributes in relation to how they view their ideal self.

6. Evaluations of descriptive social self-concepts in relation to the ideals for one’s social self-concept - An evaluation of items 2 and 4. It’s important to me how others may see me.

The theoretical background for the development of the Adolescent and Adult Self-Concept Retrospective Scale was based upon three principals of Personality Theory, which are memory, global self-evaluations and the study of early recollections.

How one feels about oneself whether positive or negative stems from the remembered past. “Therefore the person we think of as ourself, (self image) is created by a collection of memories “ (Loftus, Ketchum, 1994).

The second principal from which the AASRS was established, is the consistency of global self-evaluations. Many researchers have suggested that the preservation of one’s perception of self is the motivating force that guides behaviors. In order to maintain the identity of self there must be self consistency (Joseph, 1989).

The third principal used to support the development of the AASRS is the study of early recollections. G. Stanley Hall, Sigmund Freud and Alfred Adler collectively suggest that early recollections have some reflections on how one comes to view oneself.

“One learns to accept one’s self from having been accepted by significant people”. Arthur Combs
DEFINITION OF TERMS

The Adolescent and Adult Self-Concept Retrospective Scale - Adaptation of the Joseph Preschool and Primary Self-Concept Screening Test (JPPSST) - The Adolescent and Adult Self-Concept Retrospective Scale or AASRS current version is a refinement of the Preadolescent section of the Joseph Self-Concept Scale for Young Children. The AARS asks adolescents and adults to make the same distinctions as the Primary and Preadolescent version, however, the adults respond to the same questions had they been administered the scale at age seven (Joseph, In press).

Learning Disability - (Public Law - 94-142) states specific learning disability means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The terms includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps or mental retardation, or emotional disturbances or of environmental, cultural, or economic disadvantage.

Self-contained - a term used to refer to students who have the same classifications who remain with the same instructor for at least four main academic areas (N.J.A.C. 6:28)

Departmentalized - as defined by Lower Camden County School District, a limited amount of students with the same classification who are given an adapted general education curriculum with modifications as specified by their Individual Education Plan (IEP).

Mainstreaming - a term used to refer to the selective placement of special education students in one or more “regular” education classes. Proponents of mainstreaming generally assume that a
student must "earn" his or her opportunity to be placed in regular classes by demonstrating the ability to "keep up" with the work assigned by the classroom teacher (Research Bulletin, 1993).

**Self-Concept** - Self-concept as described by the Piers Harris Self-Concept Scale (Revised Manual, 1984) states it as a stable set of self attitudes reflecting both a description and an evaluation of one's own behaviors and attitudes (Piers, 1984).

**Inclusion** - Inclusion is a term which expresses commitment to educate each child, to the maximum extent appropriate in the classroom he or she would otherwise attend. It involves bringing the support services to the child (rather than the child to the services) and requires only that the child will benefit from being in the class using two teachers, a regular education teacher and Special Education teacher.

**ASSUMPTIONS**

A basic assumption is that the self-concept can be inferred from behavior. Erik Erikson states that we behave in accordance to how we think others see us. If this is to be true, we can say that the self-concept can be inferred (Joseph, 1989).

Another assumption is that the self-concept materializes and develops by life experiences and various social contacts such as school, family, church, and social functions.

Also, because of previous experiences and present perceptions, individuals may perceive themselves differently than how others may perceive them to be.

**LIMITATIONS**

All measures for self-concept scores are subject to conscious and unconscious distortions, usually in favor of more socially desirable responses (false positives). Both tests (inferred Rating Scale) used small samples which may not take into considerations ethnic and cultural
backgrounds. Cultural differences may also reflect personality traits and attitudes towards self disclosure.

These measurement instruments should not be used to predict a sure self-concept. However other methods such as clinical, interviews, teacher's evaluations, peer nominations, and observations in a variety of settings should also be considered.

OVERVIEW

Understanding the self-concept seems to be a difficult task. However there has been a surge of research given on the topic within the last decade. Much of the research however has focused on the elementary age population.

In order to establish a positive self-concept there must be consistency between how one perceives himself and in how others perceive one to be.

Humanistic theorists such as William James, and Carl Rogers, have been the forerunners in research regarding the self-concept. The Humanist emphasizes the drive and need for self improvement and self actualization.

There is a growing need in understanding the importance of how one’s self-concept may influence various aspects of one’s life. Having a positive or negative self-concept may be strongly related to successes and failures in life. Whether the successes or failures are in academics, our career choices, or social relationships.

The need for this study is to aid or help guide educators, teachers, parents, and support staff to view one’s self-concept as an intricate factor in predicting academic performance. This study takes a look at how 30 special education students view themselves. The instrument used was the Adolescent and Adult Self-Concept Retrospective Scale, which was administered individually and the Inferred Rating Scale completed by the teacher. The outcome helped to
predict positive correlations between the two tests. We also looked at the results to see whether
male students score higher than females on self-concept.
CHAPTER II

LITERATURE REVIEW

“I THINK THEREFORE I AM”
(Rene Descartes)

Descartes once wrote “While I wanted to think everything false, it must necessarily be that I who thought was something: and remarking that this truth, I think therefore I am, was so solid and so certain that all the most extravagant suppositions of the skeptics were incapable of upsetting it”....

This literature review will include related articles and studies on the relevancy of the self-concept and/or the measurement of it in how it impacts various aspects of the personality.

ACADEMIC SELF-CONCEPT

The academic self-concept of students is one predictor of their educational success. Many people and situations have an influence on how students think of themselves in relation to school and on their motivation to learn and determination to succeed. Relationships which shape self-concept are extremely complex and must be approached with great care and sensitivity in the classroom (Riffe, J. Anthony, 1990).

Academic self-concept in students refers to perceptions of personal self, abilities, skills and interests, along with motivations and drives needed in order to persevere and develop those skills necessary to pursue their goals.

Some theorists see the self-concept as important and necessary for academic development and success, however it’s power to predict success solely on this concept is difficult
to establish conceptually and empirically. In the minds of some educators, self-concept is of great importance and the impact it has is significant. However, some empirical studies show it to be a relatively weak correlate of achievement (.20=), accounting for five percent of the variance in student’s achievement.

The expectancy theory or attribution theory has been the conceptual basis for work done on self-concept and achievement. The expectancy theory focuses on stereotyping through which students internalizes how others perceive them whether positively or negatively. The Attribution Theory stems from the reasoning that attributes to a student’s success, whether it’s luck, “being at the right place at the right time”, ability, effort and to some degree is which people determine their own success. There is some consensus that:

- Most students begin school with determination and high expectations that they will be successful.
- Self expectations are tested and made valid by the response and feedback from important people. Students’ responses to feedback vary with their ability, attributions and age along with motivation drives and desires.
- Self-concepts can be strengthened, if students are able to attribute their success to their true efforts and not external forces, such as luck, or other elements.
- Students who feel that the “system” blocks or impede their progress towards success, might lack motivation necessary drive needed to pursue academic success.

“In the adolescent with character the whole emotional life is conditioned by what he conceives to be good, by his system of values, and by the principles and ideas that governs life”

Alexander Schneider
MULTIDIMENSIONAL SELF-CONCEPT

“This above all: to thine own self be true”
William Shakespeare

Shavelson (1979) introduced the self-concept as being a multidimensional hierarchical model. This model includes the General self-concept at the top. The General self-concept is stable however, further down the hierarchy it becomes less stable with individual experiences at the bottom (Marsh, 1985).

Another multidimensional self-concept model refers to possible selves, which interprets as “representations of the self in the past and representations of the self in the future” (Markus & Nurvius, 1989). Possible selves expresses the idea of thinking, of potentially what one may become, what one would like to become, or one’s fears of becoming. The possible selves form a connection or bond between motivation (what a guide behaviors) and cognition (the way one thinks). The way one thinks, feels, interprets and evaluate oneself can provide the motivations for future behaviors.

Various possible hoped for selves, such as the successful self, rich self, thin self, admired self or even the dreaded self can provide the basis of who we are, and what we hope to become in the future. Social interactions, and comparisons to others in everyday social contact, including images created by the mass media can influence and therefore guide the individual in choosing any variety of possible hoped for selves. This can be seen as another multidimensional model of the self.

Creating a possible self and using this image to provide the incentive to guide future behaviors can be thought of as another multidimensional self, the possible self argues that
whenever someone engages in role-taking, they are in the process of creating potential selves. Using someone else’s success to guide successful behaviors in oneself.

The working self and the core self are the last two multidimensional selves. The working self concept which derives from a set of self-conceptions that are presently active in thought and memory. These self-conceptions are manifested by particular social contacts along with our social environment (Gordon, 1968). The core self can be interpreted as the factual self which are the characteristics, or major roles that influence behaviors.

THE SELF-CONCEPT AND THE LEARNING DISABLED

This section of the paper focuses on studies and research on the self-concept and the Learning Disabled. One study looked at the self-concept and 50 learning disabled adolescents from a regular high school who were receiving resource room assistance. These individuals were given the Situation Specific Subject Competence Test for self-concept. Their scores were compared with 50 learning disabled adolescents from a self-contained program. The adolescents from the self-contained class scored identically to the mainstreamed adolescents on self-concept for math, English and physical education. The results indicated that the students isolated in the self-contained program are more similar to students in the resource programs than regionally expected (Svec, Henry, 1984).

In another study, the self-concept and the relationship between self-esteem and body image is examined in the context of physical handicap.

It suggests that physical handicap affects the learning effectiveness of the handicapped individual and diminishes the degree of self-concept experience. The perception of others is crucial to the development of the self-concept. It is shown that how others perception of oneself
particularly unfavorably, can create a negative self-concept. The way one feels about oneself can also affect one's academic performance (Lawrence B., 1974).

Using Piaget's Theory of intellectual development and Bloom's hierarchy of cognitive abilities theory, it is proposed that what students believe and think, influences behaviors, abilities, and the overall self-concept (Phipps, Eta, 1981).

Improving attributions and self-competence was the title of another article that involved 178 students from three Chicago elementary public schools. The target population were students at risk for referral for special education assessment. These students served as tutors for younger children in a peer tutoring program. The study combined attribution training in a cross-age peer tutoring program. There was a two condition design. The first condition design was an attribution - plus strategy training. The second design was a strategy-only. The 178 students were placed according to their academic standing. The three groups were at-risk, average achiever, and learning disabled. The groups involved both males and females. Factors of tutor and tutee were analyzed separately. The students were randomly assigned, with an age discrepancy of 2 years between tutor and tutees. The tutors and tutees were pre-tested prior to training and tutoring sessions. The students were post-tested after the final tutoring sessions took place. The tutors were trained in how to respond to the younger students right and wrong answers, by a graduate assistant. From the pre- and post-tests on the following measures: The Perceived Competence Scale for Children assesses children's perceived competence in cognitive, behavioral, athletic, physical appearance, and general self-worth domains. The Pictorial Scale of Perceived Competence and Acceptance for Young Students assesses cognitive competence, physical competence, peer acceptance and maternal acceptance. The Attribution Circle Scale deals with the importance of ability, effort/task difficulty, and luck when they do well or poorly
on math, reading, getting along with others, or doing puzzles. The result of this study showed that combining attribution training with peer tutoring had an impact on children’s self-perceived competence and to some degree their attributions (Yasutake, D., 1996).

One study titled Self-Concept and Perceived social support among college students with and without learning disabilities examined the relationship between 100 college students. There were 50 college students with LD and 50 without any learning disabilities, who were individually given the Self-Perception Profile for College Students and People in my Life. It concluded that students with LD had lower grades, test scores, and perceptions of their scholastic and intellectual abilities than students without any LD. Students with LD also reported more social acceptance and support particularly from campus organizations (Cosden, Merith, A., 1997).

**SELF-CONCEPT AND MATHEMATICS PERFORMANCE**

Thirty, sixth grade students in an accelerated mathematics class were placed into teams of four, with one high ability student, two mid-range ability students and one low achieving student on each team. The student was come to determine if direct instructions in interpersonal skills would increase self-esteem and improve mathematics achievement. A pre-test/post-test method was used. To test mathematics competence the University of Chicago School Mathematics Project (UCSMP) was used, along with the Perceived Competence Scale for Children. All three subscales designed to assess cognitive and social competence were measured.

The post test results showed a gain (+) of greater than 5% on the UCSMP math. Genera self-esteem scores and social competence scores also had significant gain, however cognitive competence, was not significant (Elmore, R.F., & Zenus, V., 1994).
GENDER DIFFERENCES IN SELF-CONCEPT AND ACADEMIC PERFORMANCE

Studies discussed in this section of the paper are concerned with gender differences in attitudes, self-expectations, and performance in school academics. It is suggested that girls have negative attitudes and expectations for their performance in math, however, girls have a tendency to like school and view it as a positive place. Articles in this section also discuss the importance teacher’s attitudes, parents attitudes, expectations actions (teaching styles) have on potentially improving girls’ attitudes and math performance.

Girl’s self-esteem, confidence in their abilities, life expectations, interest and pursuits in math and science as a rewarding career decline as they get older. Teacher can promote a healthier attitude in girls by using praise when appropriate and calling on girls more often. (Gill, Judith, 1994)

This study indicates that girls have lower expectations for themselves in math than boys. Girls attribute their poor performance to their inability to do math. This study explored the beliefs of third graders and junior high school students (male and female). It shows that girls’ beliefs begin as early as the elementary level. Positive teacher instruction to include methods to foster girl’s self-esteem and feelings of success. This can be done by giving positive praise to get girls to have higher expectations for themselves in math. Also teachers need to offer girls alternative and positive feedback of their performance in math. (Stipek, Deborah, 1991)

In another study on rural elementary students validates the above claim. It also suggested that girl’s positive attitudes towards math as they get older. During the early elementary years girls view math more positively than boys do, however as they continue in school, their attitudes about math changes, and becomes more negative. In order to facilitate positive attitudes in girls
towards math, teachers should provide positive praise along with other methods that might help, such as calling on them more often (Guthezahl, 1995).

The Hartner’s Self Perception Scale for College Students and the adult Form of the Dimensions of Temperament Survey Revised Scale were given to 111 college students. It showed that positive self perception was generally associated with an approaching, flexible, and positive mood pattern, and with high task orientation. There was a correlation between a student’s temperament and self concept particularly during later adolescence (Klein, 1995).

GENDER DIFFERENCE IN ACADEMIC ACHIEVEMENT

For decades, many studies and discussions have stated that men, consistently out perform women in academic achievement. This assumption has been supported by the results of standardized test and studies. White males typically have shown to outscore women not only on standardized tests but also in the academic areas of mathematics and science. Males were also more likely than females to obtain advanced academic degrees in the fields of math and science.

The reasons for these differences between males and females in academic performance can be attributed to two main factors; genetics and sociocultural factors in the environment.

Genetics argues, the assumption that males somehow possess biological capabilities or a biological gene that allows them to achieve higher academically than females. However, there are no clear cut documentation or scientific proof that support how genetic factors lead to differences between males and females in academic performance (Linn, 1991).

The second factor to consider in this discrepancy would be the sociocultural factors in the environment, such as socialization experiences in the family and school, along with school practices and societal expectations that discriminate against females and don’t expect them to be high achievers.
Families did not prepare or expect females to score higher in school, particularly in the areas of mathematics and science.

In schools, girls were not encouraged to enter those advanced academic areas that involved advanced courses in mathematics or science. Therefore females were less likely to enter careers that involved higher levels of math or science. High school counselors and teachers can be major influences in guiding decisions regarding educational planning. In a longitudinal study titled High School and Beyond by Ware and Lee, reported that females were less likely to take mathematics and science courses than females who reported they had not been helped by these school staff members. Males reported that they received help in making decisions about college from teachers and counselors more often than females reported receiving such help (Ware, 1988).

Linn and Petersen identified another perspective that noted differences in psychological characteristics between the two sexes. Such characteristics include: lower self-confidence and self-esteem among women along with higher levels of anxiety, conformity, and dependence in women. In addition, aggression among males has been hypothesized to be associated with higher achievement (Linn and Peterson, 1985).

Contrary to the above findings, some writers have begun to raise questions about the assumption that females score lower in academic performance than males. For example, in one study it showed that females achieve as well as males (Mickelson, 1989). In another study, the analyzed data from the National Longitudinal Study (NLS) done on the high school graduating class of 1977, it found that the female’s academic performance out performed males in all academic areas. This was true for grades in mathematics, science, along with grades for the Scholastic Aptitude Test (Adelson, 1991).
SELF CONCEPT AND ACADEMIC ACHIEVEMENT

Research has shown a strong relationship between self concept and academic ability. But according to this study done by Don Hamacheck there are two variables that are highly interactive and reciprocal while academic achievement may be easy to assess, the self concept is more difficult due to hidden feelings and personal perceptions. He proposed as informal self-concept inventory be used by school personnel which is designed and reflect behaviors, that previous research identify with positive or negative feelings about the self. There are fourteen behaviors or experiences that were found to be related to the self-concept. They are as follows:

1. Tends to feel upbeat and positive about talents.
2. Is popular with peers, friends made relatively easily.
3. Seems generally happy and motivated to achieve.
4. Tends to attribute successes to ability and failure to lack of effort or bad luck.
5. Is able to be assertive and hold his/her own in interpersonal relationships.
6. Tends to set realistic, reachable goals, thereby making success more possible.
7. Has had few, if any, school related failure experiences.
8. Is task persistent, usually finished what is started.
9. Takes school work seriously, strives to do well.
10. Is able to work independently on self-chosen activities.
11. Exhibits a high degree of curiosity about the world around him/her.
12. Shows a preference for activities or school work that are somewhat more difficult and challenging.
13. Seems to be intrinsically motivated to do well in school to be academically competent.
14. Has parents who are supportive; expectations are reasonable and reachable.

The fourteen behaviors and experiences that deal with negative self-concept and poor academic performance are as follows:

1. Tends to be self-disparaging talents and abilities.
2. Not very popular with peers, has trouble making friends.
3. Seems to unhappy, and unmotivated to achieve.
4. Tends to attribute successes to good luck and failures to lack of ability.
5. Gives in fairly easily to the demands of others.
6. Tends to be unrealistic unreachable goals, thereby making success more difficult.
7. Has had numerous school related failure experiences.
8. Is not very task persistent, has trouble finishing work.
9. Does not take school work very seriously, tends to goof off.
10. Has trouble working independently, needs supervision and direction.
11. Exhibits little curiosity when it comes to learning about new things.
12. Tends to lose interest when activities or school work are too difficult to challenging.
13. Appears to need a lot of extrinsic motivation to do school work, being academic does not seem important.
14. Has parents who are not very supportive, expectations tends to be unrealistic.

(Hamachek, 1995).
SUMMARY

Many researchers have determined that the self-concept refers to how one views himself. One’s self-concept is developed and influenced by important people we admire along with our everyday social contacts such as peers, family, church members, and teachers. The concept of the self has been researched greatly and found to influence many aspects of one’s personality and development.

Strong correlations between one’s self-concept and academic performance has seemed to dominate much of the research in this portion of the paper. It is noted that the higher the self-concept, or the better one may feel about one’s self the more successful one is in their academics. Students who are labeled Learning Disabled, or students classified under any category of Special Education have a tendency to have a more negative self-concept. Higher academic achievement is related to a higher self-concept as indicated in many of the studies.

Much attention has been given to whether males have a higher self-concept than females, because males score higher in math than females. Many of the studies show that perhaps this may have been true during the elementary years, that as females get older they have a tendency to do better because they begin to take school more seriously.
CHAPTER III

METHODS

Sample:

The sample population includes 30 special education students who are classified Learning Disabled from Edgewood Senior High School. Edgewood Senior High is considered part of Lower Camden County Regional High School District Number One. There are four other schools that make up this district; one other high school, two junior highs and one Special Education School.

Edgewood Regional High School is located in the Atco, New Jersey section of Winslow Township alone Route 73. The School is situated in a rural setting, that is surrounded by greenery, fields and woodlands. The school serves students from the communities of Chesilhurst, Waterford, and Winslow Townships. The school population is currently about 1300 students from grades 9 through 12. The racial composition of the school is 68% Caucasian, 28% African American, 3% Hispanic and 1% Asian / Indian.

Subjects:

The population used for this study comprised of 30 special education students, classified Learning Disabled. Eight African American males, Eight Caucasian males, one Hispanic male, Eight African American females and five Caucasian females. 93% were part of the
Departmentalized educational program and 79% were part of the mainstream, inclusion class for math.

MEASURES

Students were administered the Joseph Adult Retrospective Scale individually during their regular Math instruction time by allowing the Classroom Aide to take over class while each student is called outside the classroom individually in the hall to be given the scale. The Inferred Rating Scale will be completed by the teacher prior to the Administration of the Joseph Scale.

THE TEST PROCEDURE

The Inferred Self-Concept Scale was completed by the teacher. The rating Scale consisted of 30 items, which the rater answered by circling one of the five numbers at the right of each item. Each item is rated on a 5-point scale. Scoring is accomplished by adding up the circled numbers in each column of the individual record sheet. Column totals are summed to attain the Inferred Self-Concept Scale total score. The inferred self-concept score, can be considered of a point on a continuum between 30 and 150 with 30 representing a negative or Low Self Concept and 150 representing a positive or high self concept.

The Inferred Rating Scale was compared or correlated to the Adolescent and Adult Self Concept Scale, to test for validity. This study hypothesized that there will be a positive correlation between the two test.

The AASRS was administered individually and privately. Each test taken approximately 10 minutes. The 30 students was asked to indicate which drawings in each pair of dichotomous sets of pictures that they identify with more closely. They were to respond or imagine how they would have responded as if they were seven years old. Each answer was given a point value, of
2, 1, or 0, with 2 meaning a positive response, 1 – negative response, and 0 – indifferent.

Questions 7, 14, 21 & 28 (lie score) responses were eliminated from the total score.

**Design:**

A Correlational Design will be used to help demonstrate validity for the revised Adolescent and Adult Self Concept Retrospective Scale.

**Testable hypothesis:**

There will be a positive correlation between raw scores on the Adolescent and Adult Self Concept Retrospective Scale and the Inferred Rating Scale.

**SUMMARY**

The purpose of this study was to correlate how the teacher rated students in comparison to how they rated themselves. This is done to test for validity for the Adolescent and Adult Retrospective Scale. They hypothesis for this study is there will be a positive correlation between the Inferred Rating Scale and the AASRS.
CHAPTER IV

ANALYSIS OF RESULTS

A basis assumption regarding one's self concept is that the self concept can be inferred from behavior. Erikson (1950), has suggested that the child will see himself as other see him, and will act in accordance with this self concept. This study was conducted in the attempt to determine whether there is a relationship between the Adolescent and Adult Retrospective Scale and the Inferred Rating Scale. If how one feels about oneself is reflected by how others see one.

For this validity study, scores from the Adolescent and Adult Retrospective Self Concept Scale were correlated from scores derived from the Inferred rating scale (where teachers rate a child’s view of himself on a thirty point scale). It is suggested that there will be a positive correlation between the two scales.

The hypothesis for this study is there will be positive correlations between the Inferred Rating scale and the Adolescent and adult Self-Concept Retrospective Scale.

Pearson r correlation coefficient was conducted in the attempt to determine the degree and direction of relationship between the AASRS and the Inferred Rating Scale.

The 30 subjects Self Concept Scores for the AASRS and Inferred Scores are shown in table I. Using correlation to determine significance can be seen in Figure 1. The study demonstrated a significant positive correlation of .467 at the .01 level. A scatterplot graph in Figure I shows a positive direction or degree of relationship.
### Table I

Correlations (Pearson Correlation) – 2-tailed

<table>
<thead>
<tr>
<th>Joseph Scale</th>
<th>Joseph Scale</th>
<th>Inferred Rating Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Inferred Rating Scale</td>
<td>.467</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Correlation is significant at the 0.01 level (2-tailed)

Number of Subjects = 30
Figure 1

Joseph Self-Concept and Inferred Rating Scale

Correlation

Inferred rating scale

Pearson Correlation .467

Significant at the .01 level (2-tailed)
While not significant, the researcher looked at gender and third marking period grades as to determine whether those who have higher self concept do better academically. As Figure II demonstrate Black Females who scored Lower in Self Concept however received higher grades for third marking period. Overall the males had a higher self concept but lower third marking period grades as can be seen by Figure 3. Therefore the research question as to whether those with higher Self Concept do better academically was not found to have any significance in this study.

SUMMARY

The Analysis of the data supported the hypothesis that there will be a positive correlation between the Adolescent and Adult Retrospective Scale and the Inferred Rating Scale. Table I states that a significant positive correlation of .467 correlated with a significance at the .01 level was found.
Figure II

Scores by Gender and Race

Mean third marking period grades

Race

white

Black

male

female
Figure III

Self-Concept Scores
by Gender and Race

Mean Joseph Scale

Race
- white
- Black

Gender

male
female
CHAPTER V
SUMMARY AND CONCLUSION

The purpose of this study is to test for validity for the revisions of the Adolescent and Adult Retrospective Scale (AASRS). This is done by comparing the AASRS total raw scores with the Inferred Rating total raw scores, by using the Pearson r coefficient. Thirty classified, Learning Disabled students from a South Jersey H.S. are used.

It is important to note that researchers such as Erik Erikson, and Karen Horney makes the assumption that the development of one’s self concept can be inferred from behavior. One’s experiences with significant others and one’s earliest interactions affects the development of the self concept. We depend on other’s to tell us who we are, and what we are like. This is especially prevalent during early childhood stages of development. If a child can see himself as others see him, and behaves according, we can assume that the development of the self concept can be inferred from behavior.

While, maintaining the assumption it is important to note the significance, that significant others play in the development of school age students, where one’s self concept is formulated. Teachers and other school personnel can have a profound affect on how one perceives themselves. Students with negative or low self concept, according to research may be at risk for learning problems. Research has predicted that the self concept can predict academic success or failure. To test for Validity using the Inferred Rating Scale was a good measure to use to correlate with the AASRS.

The hypothesis for this study was, that there will be a positive correlation between the AASRS (How the Students feel about themselves compared with the Teacher’s perception of
Using the Pearson r correlation coefficient it was found that a significant positive relationship exist .467 at the .01 level.

**DISCUSSION**

The hypothesis was supported by the data. A positive relationship was found between the two scales of self-concept. Much of the research reviewed in Chapter II, Literature Review has stated and supported the findings that the self concept can be inferred from behavior and that one’s self concept can predict academic success or failure. The researcher had a good relationship with her students and felt she knew each individual pretty well.

Even though, a significant positive correlation existed between the two sets of data. No significant relationship could be predicted between academic performance and one’s self concept. According to the research the males scored higher in self concept, however, the females scored higher in their third marking period grades.

**LIMITATIONS**

One of the major limitations was the size of the sample (30). Therefore, the quantitative relationships should be considered highly preliminary and qualitative in nature. A larger sample would improve the study’s reliability.

**IMPLICATIONS**

Understanding that the development of the self concept is an important element in Learning. Perhaps more emphasis need to be developed within the School curriculum to foster or build one’s self concept. If a student with a higher self concept does better academically, it would be wise to implement programs to improve one’s social, self and overall self concept, particularly with classified students.
Understanding the self concept proves to be a multifaceted, complex debated issue. In order to state accurately the significance of the relationship between the Adolescent and Adult Retrospective Self Concept Scale and the Inferred Rating Scale, this study should be expanded to a larger more varied population. Implementing, instruments to assess one’s self concept and providing intervention programs and programs to foster ro improve one’s self concept should be considered, as part of the school curriculum. It is imperative to conceive this at the elementary level where the self concept, according to research deem most important towards the development. In a future study, using a larger sample of classified students and comparing self concept scores with non-classified students, along with overall academic performance may prove a more valid test.
REFERENCES


