This is to certify that the

thesis entitled

AN ECOLOGICAL EXAMINATION OF THE SELF-ESTEEM OF STUDENTS RECEIVING SPECIAL EDUCATION SERVICES

presented by

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has been accepted towards fulfillment
of the requirements for

Masters degree in Child Development

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Date 6-3-96

AN ECOLOGICAL EXAMINATION OF THE SELF-ESTEEM OF STUDENTS RECEIVING SPECIAL EDUCATION SERVICES

By

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A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF ARTS

Department of Family and Child Ecology

1995

ABSTRACT

AN ECOLOGICAL EXAMINATION OF THE SELF ESTEEM OF CHILDREN RECEIVING SPECIAL EDUCATION SERVICES

By

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The purpose of this study is to examine the relationships between the self esteem levels of students in special education programs and maternal self esteem levels, maternal expectations, academic achievement and the home environment. Research examining the self esteem of this population of students has typically used school related variables as sole predictors of self esteem and examined between group differences. This study addresses these deficits by exploring within group differences from an ecological perspective.

A secondary analysis of the National Longitudinal Survey of Youth data set was conducted. The sample included 208 children between the ages of 8 and 15 who were enrolled in remedial special education classes and their mothers.

This study found that children that had higher perceptions of their academic and global ability were in fact high academic achievers and had mothers that expected them to attain higher levels of education. Children with higher levels of self esteem did not have mothers with higher levels of self esteem or come from more supportive home environments, but significant relationships amongst the predictor variables suggests that there may be indirect relationships between these variables and child self esteem and warrants further research.

This is humbly dedicated to the loving memory of

my grandparents, Bertha Johnson Byrd and Dan Byrd

who both passed away during the writing of this thesis

and

my grandfather, Manuel Frazier.

Thank you for always rendering words of wisdom and encouragement, for being the best teachers that I have ever had and for allowing your spirit to linger in my life.

You are deeply missed!

This is also dedicated to my students Angelica, Tyrone, Brenda, Robbie, Johnathan, Cheryl, Rudie, Whitney, Cory, India, Leonard and Danny.

Thank you for sharing your laughter, tears, joys and fears, for showing me that nightmares don't only come during the nighttime and for teaching me more than I could have ever taught you.

ACKNOWLEDGMENTS

I would first like to give honor and praise to God for giving me the continued strength and perseverance to complete this thesis despite the many unforseen circumstances that I was faced with during its conception.

Many thanks are extended to my committee chair, Dr. Harriette P. McAdoo and my committee members, Dr. Joanne Keith and Dr. Tom Luster. Their unyielding support, insights, invaluable mentoring and patience are recognized and greatly appreciated.

Finally to my family I extend my gratitude for their constant words of encouragement and their unconditional love and support.

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Chapter 1

INTRODUCTION

For half a decade, a convergent body of literature has focused on the self esteem of students receiving special education services. Although there has been a great deal of research done in this area, researchers have limited their search by consistently included two components. First researchers have commonly measured the self esteem of students receiving special education services by using students in gifted and/or traditional classes as reference groups, rarely examining within group differences. Secondly, researchers have confined their search for predictors of self esteem to the boundaries of the educational system. A child's label, the type of classroom a child is placed in and a child's level of academic achievement are typically the sole variables proposed as influencing self esteem. Although researchers in general areas of child development have made significant links between factors in a child's ecosystem and self esteem development, researchers within the special education sector have rarely explored beyond the educational system for answers. Such deficits in the literature have produced inconsistent findings and varied results.

This study addresses these deficits in the literature by first examining the within group differences of the self esteem levels of students with special needs.

The self esteem levels of a sample of 208 students receiving special education services was examined and within group comparisons were made. Secondly, as opposed to only examining school related variables, this study explores the relationship between self esteem and other environmental factors which are embedded in a child's microsystem. Specifically this study examines whether a mothers' level of self esteem, the educational expectations a mother has for her child, the home environment, and/or the childs' level of academic achievement are related to a child's self esteem level.

The over-arching purpose of this study is to answer the following questions with regard to students that are receiving special education services:

1. Do students with higher self esteem tend to have mothers with higher self esteem?
2. Do students with higher self esteem tend to have mothers that have higher educational expectations of them?
3. Do students with higher self esteem tend to come from more emotionally supportive and cognitively stimulating home environments?
4. Do students with higher self esteem tend to have higher levels of academic achievement?
5. Are maternal self esteem, maternal educational expectations, home environments and academic achievement collectively significant predictors of child self esteem?

This examination includes several components. The structural component offers a historical overview and examination of the Special Education (SPED) system as it relates to the social and political implications of labeling, placement and how they relate to self-perceptions. Secondly, the theoretical component addresses the implications of not only the development of a child's self-esteem but the ecologically based reciprocal relationships which influence development. This component includes theories of self esteem development as well as ecological theory of human development, expectation theory and social group comparisons. Thirdly, the empirical component presents the divergent findings of existing research. These findings evidence the lack of continuity and the ambiguity in the body of literature which proposes educational variables as sole predictors of self esteem. Research which incorporates ecological variables is then presented in support of the rationale for this study.

Chapter 2

REVIEW OF LITERATURE

A Historical Overview of the Development of the Special Education System and Services

Special education is defined as the "individually planned and systematically monitored arrangement of physical settings, special equipment and materials, teaching procedures and other interventions designed to help learners with special needs achieve the greatest possible personal self-sufficiency and success in the school and community" (Heward and Orlansky, 1988, p 643). Its primary mission was to provide different services to individuals with differing capacities for learning. These services were particularly for those students who were not benefiting from traditional education (Lance, 1976).

The development and formal institutionalization of the special education system is entrenched in sociopolitical foundations which have influenced its development as well as its sustenance. The historical underpinnings which influenced the implementation of the special education system have not only affected past educational policy, but continue to impact the structure of America's educational system. With the overwhelming rise in numbers of children identified as needing special education services in the last three

decades, particularly those labeled as learning disabled, coupled with findings which suggests that deprived conditions affect children's academic ability, decisions made regarding special education services will continue to play a major role in the education of America's children (Adelman and Taylor, 1982).

From its beginnings in the late 1800s, special education services have been designed to specifically address the needs of children who have mild to severe mental and academic handicaps (Madden and Slavin, 1983). These handicaps were viewed as products of psychological deficits which in turn directly affected a student's cognitive development and academic ability. Services therefore centered around the treatment of what was still considered a "mental illness" and was most commonly termed as mental retardation (Madden and Slavin, 1983).

It was not until the mid 1900s that trained specialists and professionals in the field of research and education began to collaborate on issues related to mental health and cognitive ability. Parents in particular were advocates of the re-examination of psychologically based services which initially did not address the influence of contextual factors and did not take individual differences into consideration when diagnosing, labeling and placing their children in classes for the mentally retarded.

Societal pressures persuaded physicians, psychologists, researchers, professionals and practitioners to recognize the collective and reciprocal influence that the psychological, social, environmental, educational and biological systems had on the academic achievement of children. This

multidisciplinary view lead to the development and implementation of services which were holistically based.

Self-Contained Classrooms

In conjunction with the shift to taking an interdisciplinary approach when developing services for students with special needs, educators and policy makers alike believed that these needs would be better addressed in self-contained classrooms (Madden and Slavin, 1983). Researchers suggested that children with handicaps felt rejected and ostracized by their classmates in "regular" classroom settings which negatively affected their self-concept and academic achievement (Johnson in Madden and Slavin, 1983; Ribner, 1978). Researchers also concluded that smaller classrooms with individually designed curriculums would better address the needs of students with learning disabilities (Phipps, 1982). Thus researchers advocated for the education of children with disabilities in a climate conducive to their learning styles and needs, which meant education outside of the traditional classroom setting.

Self contained special education classrooms were therefore developed to ensure that children received educational services which met their academic needs in smaller specialized environments. Such classrooms offered lower student/teacher ratios; specially trained teachers; individually based curriculum; a homogenous student population and individualized teacher instruction. Advocates of self-contained classrooms maintained that instruction under these circumstances would not only offer students appropriate and individualized academic preparation, but that the expectations of others would be modified to

fit the abilities of the students. This in turn would aid in enhancing students expectations of themselves, their social skills and self esteem levels. For the most part, parents and educators were optimistic about the possible benefits of this type of instruction and pushed for the placement of children in segregated classroom settings. Consequently, the numbers of students with learning differences placed in self-contained classrooms grew rapidly (Madden and Slavin,1983).

Mainstreaming

It was not until the passing of the federally mandated Public Law 94-142 (The Education for All Handicapped Children Act) of 1975 that the separation of students based on academic ability was formally challenged (Smith, 1982; Kass and Maddux, 1993; Ross, 1977). Research which questioned the appropriateness of placing students with special needs in self-contained classrooms (Dunn 1968; Johnson, 1969; Jones and Gottfried, 1966; MacMillan, 1977; Meyers, 1964) and the battle between parents, special interest groups and policy makers, predicated the enactment of this public law. This act mandated that students with handicaps were by law entitled to receive "free, appropriate education" and were to be assigned "to the least restrictive environments" (Smith, 1982, p 4). In essence, the law required that schools mainstream students with special needs into the "regular" classrooms whenever possible while still offering "only as much special instruction outside of the regular classroom as absolutely necessary" (Madden and Slavin, 1983, p. 519). The passing of this act, which in essence took a similar stance to the

abolishment of separate but equal laws, also deemed the separate education of handicapped students unethical (Adelman and Taylor, 1982). This expedited the push towards placing children back into the "regular" classroom setting but offering special individualized instruction both in and outside of the classroom.

Mainstreaming forced educators to re-structure the "regular" classroom curriculum and setting to accommodate the academic, physical, and emotional needs of students with varied learning differences (Adelman and Taylor, 1982; Reisman, 1986). This was a difficult challenge for many teachers who were not trained to deal with a population of students whose learning styles were incongruent with the socially defined standard and demands of "normalcy" in the classroom structure (Thurman, 1977). Assignment to resource rooms or placement in mainstreamed remedial special education classes were common alternatives that were often offered to students with special needs as well (Kass and Maddux, 1993). The debate over the quality of education which students with special needs receive under Public Law 94-142, continues to loom over the educational system. The issue of the over-representation of African-American children in the SPED system in particular, frequently arises in the literature (Edgar, 1985; Edgar, 1987; Edgar and Hayden, 1984-85; Blackorby and Kortering, 1991).

Theoretical Framework

There are several interrelated components of the theoretical framework which are addressed. First this discussion begins with the overall development of self-esteem and addresses the role that significant others play in the

development of a child' self esteem. Ecological theory of human development then identifies what systems are potentially "significant" in a child' ecosystem. The significant micro-systems which exist in a child's environment (such as the mother child dyad and the relationship between the child and the home environment) and the importance of these relationships are highlighted as well. This discussion concludes with a presentation of theories which address the potential influence that significant others' perceptions, expectations and self feelings have on how a child feels and views him or herself.

Self Esteem Development.

Self esteem is defined by Coopersmith (1967) as, "the evaluation which the individual makes and customarily maintains with regard to himself: it expresses an attitude of approval or disapproval, and indicates the extent to which the individual believes himself to be capable, significant, successful, and worthy" (p. 5).

Psychoanalysts propose that identification, at this stage is the major vehicle for a childs' acquisition of self, transforming in later years to self-concept (Thomas, 1992). Primary attachments are necessary for this identification and self-evaluation to occur and will allow for the development of a child's personality (Cassidy, 1988). Lewis (1990) proposes that this phase of development (existential self) allows a child to realize that he or she is an individual and begin to develop the concept of "I". Pre-school age, marks the beginning of a second stage of development proposed by Lewis (1990). This stage termed, categorical-self, is when a child begins to place him or herself

into categories. It is at this time (beginning at about age 4) that children not only become more independent but more aware of their sense of self and individuality (Bee, 1992). A child then becomes aware of key qualities which are significant to his or her existence. Thus the emergence of self-awareness. As Silon and Harter (1985) proposed, in these primary years children are not cognitively equipped to attach significant meaning to self-concept and are therefore unable to gain a sense of global self-perception. They also are not capable of making distinctions between their competencies in different domains (ie: physical versus cognitive domains). Younger children therefore tend to have generally positive self-perceptions in all domains (Butler and Marinov-Glassman, 1994; Harter, 1983).

Piagetean theory proposes that children develop the cognitive capacity to infer the relevance of self evaluation between second and fourth grades (Thomas 1992). It is at this time in a child' developmental cycle that awareness becomes key. This awareness is fostered through several significant developmental transitions. First children develop an expanded vocabulary, which allows them to identify themselves verbally. They obtain the capacity to verbalize specific unique identifying labels which separate them from others in their environment (Thomas, 1992). Secondly, children begin to enter the concrete operational stage of cognition proposed by Piaget. Cognitively children become capable of logically processing complex information and therefore are able to interpret and add concrete meaning to their self evaluation (Thomas, 1992). Finally, it is also during this time that a child gradually

becomes an organism entrenched within other systems. The family system in most instances is the primary and most salient source of identification for younger children. The school system however soon becomes a major point of reference in development of self concept for school age children. It is within these systems that they begin to interact socially with other children their own age outside of the family. At this age they also begin to think comparatively, deciphering differences based more on external characteristics. Social comparisons therefore become much more significant (Butler and Marinov-Glassman, 1994; Mack and Ablon, 1983).

It is during the transition from late childhood to early adolescence that self evaluations become more domain specific. This concept fits Harter's theory on self esteem development which is a culmination of the theoretical frameworks of both James and Cooley (Harter, 1990). James (in Harter, 1990) asserts that one's overall sense of esteem in a given area is highly dependent on how adequately the individual performs in the areas that they consider success to be important. Cooley and Mead however argue that an individual's self esteem is highly dependent on what others think of them and that they imitate others attitudes which thus forms the looking glass self (in Harter, 1990). Harter has given evidence which supports both theories. In her examination of self esteem in early adolescents, eight specific domains of self perceptions were identified. These included: scholastic competence, job competence, close friendships, athletic competence, physical appearance, social acceptance, romantic appeal and conduct. Harter found that indeed children did report higher levels of self

esteem in areas that were significant to them. She also found however, that these self perceptions depended highly on with whom they compared themselves and used as a reference group (Harter, 1982, 1983, 1986b, 1990).

Although a true sense of self-esteem does not become evident until a child enters school, literature has been somewhat remiss in solely examining school related variables as potential predictors of self-esteem. Children form a myriad of reciprocal relationships with people in their environment before beginning school. These relationships do not cease to exist upon their entering kindergarten. Quite contrarily, these relationships are often nurtured and new relationships are formed as well (Mack and Ablon, 1983). Consequently social and recreational activities, neighborhood and community interactions, religious affiliations, peer relationships and peer reference groups and the family system can all serve as vital influences in child development. In essence, although children spend approximately one third of their day, on average, interacting with the school system, approximately 70 % of their school day is spent interacting outside of the school (See Figure 1). Excluding these relationships from the model of explaining child self esteem leaves a large portion of a child's system untapped. Ecological theory of human development can be used to identify some of the key reciprocal relationships and interactions which exist in an a child's ecosystem and to substantiate the dynamics of these relationships.

Ecological Theory of Human Development.

The development of self-esteem has been linked to not only endogenous influences, but to external factors in the child's ecosystem (Coopersmith, 1967;

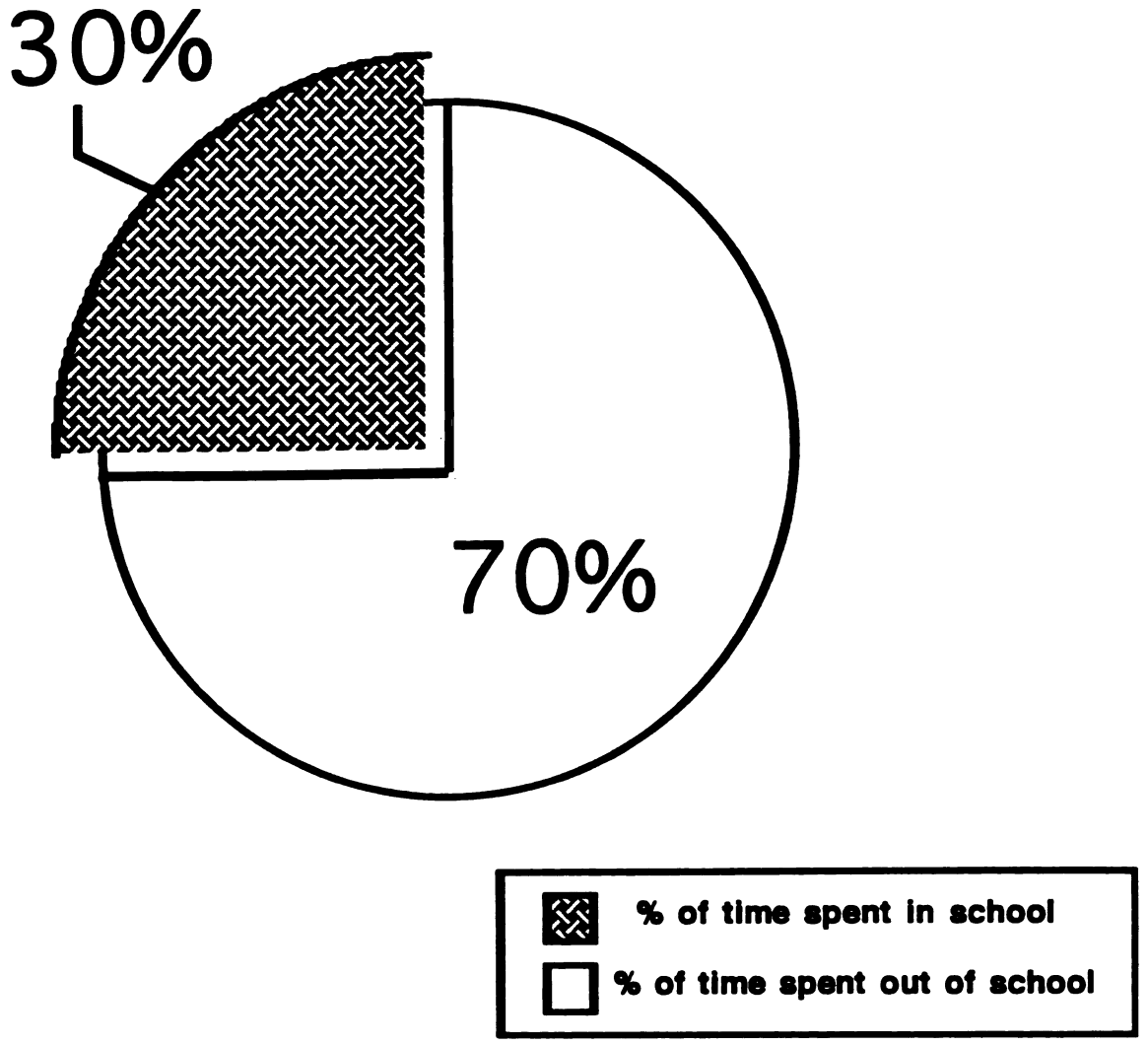

Figure 1. Percentage of time students spend in school

Mack and Ablon, 1983; Rosenberg, 1965; Stone, 1984). Bronfenbrenner (1989) describes this ecosystem as encompassing salient relationships which influence human development through direct and indirect interaction. Bronfenbrenner (1989) asserts that the development process is affected by the "relations between these settings, and by the larger contexts in which the settings are embedded" (p. 188). He describes these relationships as reciprocal and mutually beneficial interactions between the organism and the environment. He proposes four interdependent levels within ecological systems which affect growth and development. These levels (micro-, meso-, exo- and macro-) encompass primary behavior settings which can include the family, the community, peers, the school, parents' work place, the cultural milieu and the interactions between these systems (Thomas, 1992). As noted by Bronfenbrenner (1979), the recognition of a child's ecosystem as encompassing significant influential factors and relationships affecting overall development is essential.

Caution should be taken however in generalizing observations made at one point in time to having significant long term relevance. Ecological transitions take place when major changes are made within the ecosystem, altering the system patterns and subsequent relationships. This notion should be kept in mind when evaluating the relationships between existing systems and the organism (the child). A child's ecosystem thus can be recognized as embedding significant relationships outside of the school. The reciprocity between systems and the strength of these relationships should be examined (Thomas, 1992).

In essence the ecological model suggests that there are several components of a child's ecosystem which can influence development. As the microsystem is the most basic and most direct level of interaction within the environment, it seems only appropriate that this unit be examined. The application of this model in the present research includes examining self-esteem development in the context of a special education setting, while examining other segments of the child's ecosystem which potentially influence development. This research proposes to begin this examination by investigating the relationship between maternal and home influences and child self esteem.

Significant Others Influences on Self Esteem.

Prior to interactions and comparisons with peers within the school system, initial forms of reflected appraisal and approval are often received from parents. Symbolic interaction proposes that self-concept is a product of the reflected appraisals of significant others and is molded by these interactions (Stafford and Bayer, 1993). Mead describes the incorporation of significant opinions in the form of the "generalized other", in which attitudes are pooled (Harter, 1990). These reflected appraisals define the "looking-glass self" (Cooley,1921). As the family is the first and primary source of interaction for children, it is often viewed as holding the fundamental seeds of childrens' overall development. They first seek the approval and basic acceptance of family members during infancy as they form attachments with significant others and develop a sense of dependency (Mack and Ablon, 1983). The independence that generally follows once a sense of security sis formed is primarily based on the socialization of the

child as well as the child' meeting of social standards (within the family and later within the larger society). Therefore, by the time a child reaches school age, "the foundations of the self have been formed" (Mack and Ablon, 1983, p 263).

Maternal Influences on Self Esteem.

Research has documented the impact that mothers have on child self esteem (Coopersmith, 1967; Harter, 1983; Rosenberg, 1965). Although the relationship between maternal self esteem and child self esteem has not been researched extensively, how mothers feel about themselves has been shown to impact their behavior, parenting skills, perceptions and appraisals and can in turn affect their child's self concept (Stafford and Bayer,1993). Coopersmith (1967) studied the conditions under which positive self esteem is developed, as well as those which produce lower levels of self esteem. This study revealed that mothers of children with high self esteem were more likely to be rated as having higher levels of self esteems themselves and as being more emotionally stable than mothers of children with low or medium self esteem.

As inherent in ecological theory and such theories as symbolic interactionism, this relationship is not unidirectional, but bi-directional. This present research therefore recognizes the potential for reciprocal relationships between systems. As implicit in Coopersmith's work (1967), child self esteem could in essence predict maternal self esteem, attitudes and adjustments just as much as the opposite could hold true. This research therefore does not propose to show that there is a causal relationship, but merely a significant one.

The Effects of Labeling on the Expectations and Perceptions of Significant Others.

Research has consistently supported the theory of labeling in special education and its negative effects on self esteem (Brophy and Good, 1970; Coleman, 1983; Coleman, 1984; Good, 1982; Grolnick and Ryan, 1990; Montgomery, 1994). Evidence has documented both the short term and long term effects of labeling. Researchers have suggested that the varied effects of labeling include: lowered academic achievement (Renick and Harter, 1989); difficult post-secondary adjustment (Fourqurean and LaCourt, 1990; Mithaug, Horiuchi and Fanning, 1985); high dropout rates (Blackorby and Kortering, 1991); low educational expectations (Weaver, 1979) and low self esteem (Butler and Marinov-Glassman, 1994; Ribner, 1978).

Not only have labels been shown to negatively affect the child, but they have also been shown to influence others' perceptions, appraisals and expectations of the child. This perception may be based on the label and not on actual behavior. Coleman (1984) found that mothers of students labeled learning disabled assessed their child's global self-concept as being lower than the child's self assessment. Contrarily, mothers of children, who were identified by teachers as being in need of special education services, but had not been labeled, rated their children as having higher self concepts than the children's self evaluation. When compared to "regular/non-disabled" and learning disabled children, the group of non-labeled, low-achieving children actually had lower self-concepts than their counterparts. Such findings suggest that the label

itself and the identification process influence the evaluations and perceptions of significant others. These perceptions may be quite different from the self-perception, evaluations and concepts the child holds of him or herself.

A cyclical relationship seems to exist here in that not only may the label influence others' perceptions of the child, but significant others' convictions as to the accuracy of the label may in turn contribute to the actual behavior of the child (Covington, 1992; Rosenthal and Jacobson,1968). This process is often referred to by theorists as a self fulfilling prophecy.

Two important linkages exist in this theoretical framework. This link is between the influence that a mother's perception of her child's abilities has on how the child views him or herself (as previously discussed) and the influence that these perceptions have on the expectations she holds for her child. Research has documented the importance of the relationship between significant others' perceptions, appraisals and acceptance and child self esteem (Harter, 1986b; Harter, 1990; Stafford and Bayer, 1993). The perceptions a mother has of her child's abilities may in turn influence the expectations that she holds for him or her. Although no studies were found which examine the direct relationship between child self esteem and maternal expectations, the literature suggests that children internalize significant others' perceptions and expectations, which helps to formulate their own self concept (Staines, 1958; Sherwood, 1965; Finn, 1972). As expectations are partly based on ones' perception of anothers' ability, this research proposes that mothers expectations (based in part on the mother's" perception of the child's abilities),

may be related to the way a child feels about him or herself. Although this present research does not propose causal relationships, it is important to note that there are some researchers that theorize that children are influenced by parental expectations, and others that theorize that parental expectations are shaped by children behavior. Entwisle and Hayduk (in Luster and McAdoo, 1995) contended that children do not live up to their parents expectations, but rather that parents shape their expectations based on their child's academic ability (1993).

Home Environment.

Staines (1958) contends that the concept of self and self esteem is learned from the child's experiences in the school as well as the home. Recent literature has examined the home and community as potential venues for stress, as well as potentially offering support and nurturance for children in their development (Garbarino, Kostelny and Dubrow, 1991). A child's environment can be debilitating or bolstering for his or her self concept and self esteem. Salient components of the home environment, which can influence self esteem, can include the availability of adequate resources which supplement the child's learning differences and the fostering of a supportive and nurturing home environment (both physically and emotionally).

Researchers have also recognized the social environment as being an important and influential factor in the formation of self-concept and how one perceives his or her abilities, which ultimately results in self esteem development (Kwiatkowska in Oppenheimer, 1990). Kwiatkowska contends that

it is not clear whether fully supportive and friendly environments lead to a more rapid development of self knowledge. An example which he offers in this context is that a non-supportive environment could cause the emergence of self-knowledge, but at the same time foster the emergence of a less positive self-concept.

Contradictory Findings in The Literature on The Effects of Educational Factors on Self Esteem

As previously mentioned several primary educational factors have been proposed as influencing the self esteem of children receiving special education services. Two of these factors have been researched extensively in the literature. The first of these variables is labeling. Several studies have shown that the labeling and identification of students alone has negative effects on their self-perceptions and others' perceptions of them (Franco, 1982; Good, 1982; Grolnik and Ryan 1990; Montgomery, 1994). These findings support the proposition that the examination of the effects of labeling and class placement on students must be viewed as independent variables which have individual effects (MacMillian, Jones and Aloia, 1974).

Montgomery (1994) found that not only did mainstreamed students labeled as learning disabled report lower academic and competence self-concepts than did their counterparts who were non-disabled and high achievers, but that teachers actually gave the learning disabled students a lower rating of self-concept than the students gave themselves. Grolnik and Ryan (1990) found that students labeled with learning disabilities reported lower levels of academic

self-concept when matched on IQ than non-disabled students.

Contrary to both findings, Battle and Blowers (1982) found enhanced self-esteem in students after being labeled as learning disabled and placed in special education classes. A group of students in grades 1 through 7, who were identified as in need of special education services, were pretested prior to the attachment of the label and enrollment in a special education class. A control group of students in "regular" classes were also pre-tested. After testing both groups, one and two years after the experimental group had received treatment, findings revealed that the labeled students in special education classes "experienced greater gains in self esteem and perception of ability over a three year period" (p. 101), than did the non-disabled and non-labeled students in "regular" classes. Battle and Blowers (1982) do suggest that the reasons behind such gains could be due to the smaller class size and individualized instruction. Greater academic success is fostered in such environments and has been found to be linked to higher levels of self esteem (Battle and Blowers, 1982). They also propose the social comparison theory as a possible theoretical rationale for the significant differences in self-esteem. Such findings should also be viewed with caution as the groups were not matched on academic achievement which could explain some of the between group differences. Secondly, no evidence was offered as to the validation of the Culture-Free Self Esteem Inventory for learning disabled populations.

Further evidence is offered in Stone's (1984) examination of mean self-concept scores. Findings showed that students labeled as learning disabled

and educated in self-contained classrooms had higher mean self-concept scores (57.07) than that of the "normative" group mean score which was 51.84. This led her to conclude that the labeling of learning disabled may not directly contribute to lowered self-concept.

Contrary to both types of findings Stagger, Chassin and Young (1983) compared the self esteem of students labeled learning disabled/ educable mentally retarded and their "non-disabled" peers. They did not find any significant differences between the global self-esteem levels of the students

The second type of research examined class placement as a significant indicator of self-esteem (Battle and Blowers, 1982; Budoff and Gottlieb, 1976; Calhoun and Elliott, 1977; Renick and Harter, 1989; Ribner, 1978). Such studies typically examined the three most common types of services offered to students with learning disabilities: mainstreaming with individualized special instruction in the classroom; mainstreaming with remedial services outside of the classroom and self-contained classrooms. Many of these studies included multiple group comparisons which examined the label of the students embedded in each of these settings as well (Butler and Marinov-Glassman, 1994; Montgomery, 1994; Vaughn, Haager, Hogan and Kouzekanani, 1992).

Some research suggests that students who are mainstreamed and receive in-classroom instruction, have higher levels of self-esteem than students placed in self-contained classrooms (Calhoun and Elliott, 1977). Researchers have also argued this point and found the contrary (Butler and Marinov-Glassman, 1994; Carroll et al., 1984; Coleman, 1983; Rogers and Saklofske, 1985). Ribner

(1978) found that 8-16 year old male students identified as minimally brain damaged who were placed in special education classes had significantly higher levels of self-concept than their counterparts who had similar disabilities but because they were not yet identified were educated in "regular" classrooms.

Research has also concluded that mainstreamed students who receive remedial instruction outside of the classroom have higher self-esteems than their counterparts who are educated solely in self-contained classrooms (Budoff and Gottlieb, 1976 ; Carroll, 1959; Strang, Smith and Rogers, 1978) as well as in regular classrooms (Renick and Harter, 1989). Strang, Smith and Rogers (1978) found that students who were mainstreamed but received remedial instruction for part of the day demonstrated higher levels of self-esteem relative to their counterparts who were educated in full-time self-contained classrooms. Studies conducted by Renick and Harter (1989) revealed that mainstreamed children reported higher levels of academic competence and in turn higher levels of global self-worth when they were in their remedial instructional setting than when they were in the regular classroom. Again, there have been studies which counter this argument. (Meece and Wang, 1982; Smith and Kennedy, 1967; Vaughn, Haager, Hogan and Kouzekanani, 1992).

More recent research brings this wealth of literature full-circle by examining the positive effects of self-contained classrooms, proposing that students in self-contained environments have higher self-esteem levels than their similar peers in both comparison groups (Butler and Marinov-Glassman, 1994).

Research on Ecological Predictors of Self Esteem

In researchers efforts to explain the ambiguity in findings on the self-esteem of students with special educational needs, some have explored other environmental factors. Researchers who have embarked upon this perspective found that a myriad of environmental factors external to the school system have an impact on children's self-esteem (Coopersmith, 1967; Montgomery, 1994; Rosenberg,1965; Stone, 1984). These factors include academic achievement (Kershner, 1990; Liu, Kaplan and Risser, 1992); peer perceptions (Vaughn, Haager, Hogan and Kouzekanani, 1992); teacher expectations (Montgomery, 1994); familial system influences (Stone, 1984) and maternal perceptions and self-esteem (Montgomery, 1994).

Parental Influences.

In examining the self esteem of students with learning disabilities, theorists have suggested that student's self esteem is derived from criteria employed by significant persons in the child's context or social group (Coopersmith, 1967). Researchers have therefore examined parental influences generally, and maternal influences specifically as they relate to child self esteem.

Rosenberg (1965) found significant correlations between parental attention, their self esteem and child self esteem. In examining a sample of children with special needs, Stone (1984) found significant positive relationships between low self concept and negative family perceptions, suggesting that "self-concept may be more closely associated with perceived parental expectations and family attitudes" (p. 43).

Other studies have found similar relationships between parent-child relationships, parenting-styles, anxiety and attachment as it relates to self-esteem development. Dickstein and Posner (1978) found that the quality of the parent-child relationship in the child's view was significantly correlated with self esteem ($r=.47$, $p<.002$). They also concluded that there is a clear distinction between same sex dyads. The correlation between boys and fathers and girls and mothers yielded significantly higher correlations on child self-esteem than the opposite sexed parent-child dyad (Dickstein and Posner, 1978).

Griffore and Samuels (1978) found that "overall, mothers with high anxiety tend to have children who have low self-esteem" (p. 96). As high anxiety levels have been linked to low levels of self-esteem (see Mack and Ablon, 1983), this finding is significantly appropriate in this context.

Studies have also revealed that children's perceptions of their mothers' child-rearing style and behavior are positively correlated with children's self-esteem (Peterson, Sothworth and Peters, 1983). Graybill (1978) concluded that children who perceived their mothers as using psychological pressure to ensure obedience displayed lower self-esteems, but children who viewed their mothers as accepting and nurturing displayed higher levels of self-esteem.

Attachment has also been linked with the development of positive self-esteem (Sroufe, 1983). Cassidy (1988) found a pattern in which more securely attached children reported more positive levels of self-esteem than insecurely attached children. Cassidy (1988) however urges future research to look at the causal links of this relationship. She proposes that there is a significant

correlation but that an insecure parent-child attachment could be the result of a child's low self-esteem and not the cause.

Further examination of the influences that maternal factors have on the self esteem of children receiving SPED services would lend to the ecologically based research which is necessary to examine the combined effects of contextual influences and parenting behaviors on developmental outcomes in children (Bronfenbrenner, 1979; Luster and Okagaki, 1993; Thurman, 1977). Given the limited research which has examined the relationship between child self esteem and maternal self esteem, particularly with SPED populations, this present research examines this avenue.

Additional Ecological Influences

In examining additional ecological influences of self-esteem, Stone (1984) notes that child-rearing practices, home environment and parental expectations are key predictors of self-esteem. She suggests therefore that teachers may actually be limited in the influence that they have over the development of the self-esteem of their students. In addition, Mack and Ablon (1983) make mention of the significant influences that time (in the form of macro-social and historical changes) can have on the self-image of a cohort of subjects. In their review of a study conducted by Offer, Ostrov and Howard, in 1981 (Mack and Ablon, 1983), they conclude that adolescents in the 1970s had more negative self-images than adolescents in the 1960s. The authors offered explanations which were grounded in "social, economic and political" changes which influenced broad self-images in the social milieu of youth (Mack and Ablon, 1983, p 20).

The absence of literature which addresses the relationship between the home environment, maternal self-esteem and maternal expectations and self-esteem development in children receiving SPED services, leaves a significant portion of this field untapped. This present research examines these linkages specifically as they relate to a special education population.

Chapter 3

METHODOLOGY

Conceptual and Operational Definitions

1. Child self-esteem:

   Conceptual: the personally defined meanings and perceptions which the student holds concerning their sense of academic and global self-worth including their abilities and their confidence levels in these areas.

   Operational: the students self-esteem is measured by two sub-scales on the Harter Perceived Competence Scale. The sub-scales assess global and scholastic competence.

2. Students receiving special education services:

   Conceptual: students who because of significant learning deficits receive remedial instruction in special education classes.

   Operational: mothers affirmative responses to variable number E7860 on the NLSY assessment of family and school background. The question is stated as follows: Is child in special class for remedial work? Those whose response was "no" were excluded from the sample.

3. Maternal self-esteem:

   Conceptual: the personally defined meanings and perceptions which the mother holds concerning her sense of global self-worth, her abilities, and

her confidence level.

Operational: scores on the Rosenberg Self-Esteem Measure.

4. Educational expectations:

Conceptual: the expectations the mother holds regarding her child's level of educational attainment.

Operational: the mothers' response to variable number E9989 on the NLSY assessment of family and school background. The question is stated as follows: How far do you think your child will go in school?

5. Home environment:

Conceptual: an assessment of the family home environment, specifically assessing the amount of emotional support and cognitive stimulation that is available in the home.

Operational: the obtained scores on the sub-scales of the Home Observation of Measurement of the Environment- Short Form Scale (HOME-SF). The sub-scales include an assessment of home emotional support and home cognitive stimulation.

6. Academic Achievement:

Conceptual: an assessment of the child's academic abilities solely based on standardized tests in mathematics and reading.

Operational: the 3 obtained scores on the Peabody Individual Achievement Test (PIAT) for mathematics, reading recognition and reading comprehension.

Research Hypotheses

H_1: There will be a significant positive correlation between child scholastic self esteem and child academic achievement.

H_2: There will be a significant positive correlation between child global self esteem and child academic achievement.

H_3: There will be a significant positive correlation between child scholastic self esteem and maternal self esteem.

H_4: There will be a significant positive correlation between child global self esteem and maternal self esteem.

H_5: There will be a significant positive correlation between child scholastic self-esteem and maternal educational expectations.

H_6: There will be a significant positive correlation between child global self-esteem and maternal educational expectations.

H_7: There will be a significant positive correlation between child scholastic self-esteem and supportive home environments.

H_8: There will be a significant positive correlation between child global self-esteem and supportive home environments.

H_9: There will be a significant positive correlation between maternal self esteem and supportive home environments.

H_{10}: There will be a significant positive correlation between maternal self esteem and child academic achievement.

H_{11}: There will be a significant positive correlation between maternal self esteem and maternal expectations.

H_{12}: There will be a significant positive correlation between supportive home environments and child academic achievement.

H_{13}: There will be a significant positive correlation between supportive home environments and maternal educational expectations.

H_{14}: There will be a significant positive correlation between maternal educational expectations and child academic achievement.

H_{15}: Maternal self esteem, maternal educational expectations, child academic achievement and supportive home environments will be significant predictors of child scholastic self esteem.

H_{16}: Maternal self esteem, maternal educational expectations, child academic achievement and supportive home environments will be significant predictors of child global self esteem.

Research Design

This present research is a secondary analysis using the National Longitudinal Survey of Youth (NLSY). The NLSY is a subset of the National Longitudinal Surveys of Labor Market Experience (NLS) which was originally developed in the mid-1960s. The original sample consisted of four cohorts. The first was men ages 45-59 years, the second was women ages 30-44 years and the third and fourth were men and women ages 14-24 years. In 1979 the NLS Youth was introduced. This fifth cohort consisted of men and women (ages 14-21), encompassing both civilian and military persons. Within this cohort there was an over-sampling of Blacks, Hispanics and economically disadvantaged

Whites. In 1982, a set of comprehensive questions regarding child care and fertility were added and have been included each year through 1992. The original NLSY sample consisted of 3 subsamples. The first was a cross-sectional sample of 6,111 youth. They represented non-institutionalized civilian youth, ages 14-21. The second sample of 5,295 was designed to over-sample Black, Hispanic and disadvantaged White persons. The fifth cohort consisted of 1,280 youth, ages 17-21. Who were enlisted in 4 branches of the military as of September, 1978. The data set contains measurement data on mothers and their children. Waves of interviews with mothers and their children have been conducted in 1986, 1988, 1990 and 1992. The assessments were completed by a total of 4,971 children in 1986 and their mothers. A low attrition rate permitted the inclusion of a large portion of this population biannually. Children were assessed on measures of behavior, cognitive levels and affect domains (Baker, Keck, Mott, and Quinlan, 1993).

Sample Description

Subjects included in this study were drawn from a larger cohort of 1,286 children ranging in age from 8 to 15. Criteria for selection was based on mothers' identification of their child being enrolled in a special education class for remedial work. A "yes" response to this question was grounds for inclusion. This information was gathered from the mothers' response to item E9887 in the school and family background construct in 1990.

This sub-sample included 208 children and their mothers. Research has shown that students with mental retardation (ages 9-12) do not make the

abstract evaluations of self that are tapped by the global self worth sub-scale (Silon and Harter, 1985). Children with mental retardation and autism were therefore not selected from the larger data set. Students were in grades 2-10 and primarily attended public schools (97.6%). Forty nine percent of the students were African American, 20% were Hispanic and 30% were White. Fifty eight percent of this sample were males. Half of the sample had repeated a grade (49.5%) and 19.2% had been expelled or suspended from school.

The mean age of the mother at the birth of the child was 18.4 and the mean current age was 30.6. An overwhelming majority of the children resided with their mother (98.6%) in urban communities (79.3%), 32.7% had the father living in the household and 8.2% had the mother's partner living in the household. Half of this sample of mothers were married (51.4%), while 19.7% were never married, 15.9% were divorced and 12% were separated. Educational attainment of the mother and her spouse varied, with half of the mothers (48.8%) and one third of the fathers (31.1%) having obtained less than a 12th grade education.

On average there were a least three children under the age of 18 living in the mother's household. The mothers occupational status included 46.6% working; 35.1% homemakers; 6.3% unemployed and 4.8% attending school. The mean total net income for these families was $23,275 (See Table 1).

Table 1
Demographic Characteristics (N=208)

Variable	%	Mean	SD
Child Characteristics			
Age (Years)		12.1	1.6
8-11	51.4		
12-15	48.3		
Sex			
Male	58.2		
Female	41.3		
Race			
African-American	49.3		
Hispanic	20.3		
Caucasian	30.3		
Child Education		5	1.3
Grade In School (Range =2-10)			
Attends Public School	97.6		
Retained In Grade For 1 Year or More	49.5		
Suspended or Expelled	19.2		
Residence/Household Composition			
Urban Residence	79.3		
Father in Household	32.7		
Reside with Mother	98.6		
Mother Characteristics			
Age (Years)		30.6	1.8
Age at Birth of Child		18.5	1.9
# of Children <18 Years of Age in HH		3.0	1.2
Married	51.4		
Employment			
Net Income (Annual)		$23,274.50	
Working	46.6		
Homemaker	35.1		
Adult Educational Characteristics			
Highest Grade Completed by Mother		10.8	2.1
Highest Grade Completed by Spouse		11.6	2.3

Instrumentation and Measurement Procedures

Perceived Competence Scale for Children.

Child self-esteem was assessed using scores from Harter's (1982) Perceived Competence Scale for Children. This measurement design assesses the self-perceptions of children (ages 8-14), in cognitive competence, social competence, physical competence and general self-worth. Only the Cognitive and Global Competence scales are included in the NLSY. Self esteem is therefore assessed using scores from the two sub-scales, which were last administered in 1990. The Perceived Competence Scale is a 28 item self-reporting scale which uses a 4 point Likert type response rating. The higher the score, the higher the self-esteem or self-perception (negatively worded items were recoded to reflect this rating scale). Sub-scale reliabilities range from .77 to .84 and test-retest reliabilities range from .69 to .88 at 3-9 month intervals (Renick and Harter, 1989). This measure has been widely used and validated with special education and learning disabled populations. The mean cognitive self esteem for this sample was 15.46 (SD = 4.02) and 19.20 for global self esteem (SD = 3.94).

A preliminary analysis of the psychometric properties of the Perceived Competence Scale for Children was run on the present sample as a means of assessing the appropriateness of this measure for use with this population. The mean scores for the items on the Global Self Esteem measure ranged from 3.0 to 3.3 and from 2.3 to 2.9 for the Scholastic Self Esteem items. The standard deviations showed evidence of sufficient variability for the items on the two sub-

scales ranging from .92 to 1.15. Reliabilities further substantiated these item statistics yielding alphas of .66 for the Scholastic Self Esteem scale and .71 for the Global Self Esteem scale. These reliabilities are consistent with Harter's (1989) findings when these scales were used with a learning disabled population (scholastic, .69 and global, .73), as well as with NLSY (Baker et al., 1993) findings when used with the total population of students (scholastic, .69 and global, .67).

Rosenberg Self Esteem Scale.

Maternal self-esteem was measured using the Rosenberg Self Esteem Scale (1965). Scores were obtained from the most recent (1987) administration of this instrument. This is a 10 item scale which has frequently been cited as being one of the more reliable and validated measures of self-esteem (Jones, Ricker and Smith, 1980). It has a 4 point Likert type response rating. The higher the score, the higher the self-esteem or self-perception. This sample of mothers yielded a reliability of .87 with mean item scores ranging from 2.7 to 3.4. The mean score for this sample was 31.3 (SD = 4.2).

Peabody Individual Achievement Tests.

Academic achievement was measured using scores on the Peabody Individual Achievement Tests (PIAT) for mathematics, reading comprehension and reading recognition. Scores were obtained from the 1990 administration of these tests. The mean math, reading comprehension and reading recognition scores for this sample were 87.684 (SD=11.64), 87.426 (SD=14.24) and 89.085 (SD = 14.42), respectively. These score fall well below the average scores of

the norming national sample. The average standard score for each measure is 100 (Baker et al., 1993).

Home Observation of Measurement of the Environment - Short Form.

Home environment was measured by scores on the Home Observation of Measurement of the Environment-Short Form (HOME-SF). This is a self-report and observation measure which assesses home conditions. This modified version of the HOME inventory has proven to be both reliable and valid in previous studies. Standard scores were obtained from the most recent application of the HOME which was in 1990. The mean emotional home score for this sample was 96.8 (SD = 15.3) and the mean cognitive home score for this sample was 96.1 (SD = 15.9). These scores fall slightly below the internally normed mean standard score for the population of NLSY participants which is 100, with a SD of 15.0 (Baker et al., 1993).

Maternal Expectations.

Maternal expectations were measured using the response to an item in the school and family background measure. This measure includes an assessment of how far the mother thinks the child will go in school. Responses were forced and include: leaving high school; completing high school; receiving a partial college education; completing college and receiving post college education. Higher scores on the maternal expectation measure indicated the mothers' expectation of higher levels of educational attainment.

Multiple Positive Environmental Influences on Child Self Esteem Index.

To assess whether multiple positive influences are better indicators of high self esteem in children than single factors, the researcher constructed an index. The Multiple Positive Environmental Influences on Child Self Esteem Index (MPEIC), included scores ranging from zero to seven. Home cognitive and emotional scores, PIAT reading recognition, math and reading comprehension scores, maternal self esteem and maternal expectations were recoded into dichotomously scored items. Variables were split at the mean (with the exception of maternal expectations). For recoded continuous variables, a score of one indicated high scores and a score of zero indicated low scores. Educational expectations were divided into two groups: mothers that did not expect their child to receive an education beyond high school and mothers that expected their child to receive a post high school education. The items were then summed producing scores within the range of zero to seven.

Chapter 4

RESULTS

Adequacy of Sample

To assess the appropriateness of comparing children within this given age bracket (ages 8-15), age differences were examined. Concerns have been raised in the literature as to the appropriateness of making comparisons across these age groups. Arguments have centered around younger childrens' inability to accurately differentiate between various dimensions of self, and therefore generally displaying higher levels of self esteem (Butler and Marinov-Glassman,1994; Harter,1983). Arguments have also been raised with regards to their ability to understand the items on the sub-scales (Baker et al., 1993). Other arguments have asserted that although some of the homogeneity in the self-perceptions of younger children may be attributable to not yet attained cognitive ability (Baker et al., 1993), a portion can be attributed to a child's experiences or lack thereof. As children gain more extensive experiences in group comparison and begin to attach meaning to their placement on the academic continuum, as well as in the school context, self esteem levels may begin to have more variability (Harter, 1989).

These arguments typically refer to children younger than eight years of

age, but are appropriate in this context because by definition, children receiving remedial education typically have lower cognitive abilities than their counterparts. In essence, this may mean that although a child is 8 years old, they may have the cognitive abilities and social experiences of a 6 or 7 year old and may also only be in the first grade. This holds especially true for this sample of students for two reasons. First, half of this sample was retained in grade for more than one year. Secondly, the social experiences of this sample are probably very different because half of the students are in elementary school and half are in middle school.

The mean self esteem scores of 8 through 11 year old students were therefore compared to that of students ages 12 through 15. T-tests were also run on the predictor variables (PIAT scores, HOME scores, maternal expectations and maternal self esteem) to detect any differences in these scores.

The results of the mean scores show a slight difference in the reading comprehension scores of the two age groups, with the younger group yielding a modestly higher mean score ($\underline{M}$ = 89.6, $\underline{SD}$ = 14.5), than the older group ($\underline{M}$ = 85.2, $\underline{SD}$ = 13.7), $\underline{t}$ = 2.11, $\underline{p} < .05$. There are no other significant differences between the mean scores of the younger or older age group with regard to child or maternal self esteem levels, HOME scores, or PIAT reading recognition and math scores. These findings do not support the concerns raised in the literature in relation to younger children having significantly higher self esteem levels than older children. Such findings imply the appropriateness of examining this

present sample of students collectively (see Table 2).

Table 2

Means and Standard Deviations of Child and Maternal Self Esteem, HOME and PIAT Scores by Age

	All Ages			Ages 8-11			Ages 12-15				
	n	M	SD	n	M	SD	n	M	SD	t	p
Self Esteem											
Child Global	196	19.2	3.9	100	19.5	3.7	96	18.98	4.2	.89	.376
Child Scholastic	196	15.5	4.0	100	15.8	3.9	96	15.1	4.1	1.13	.261
Maternal	191	31.3	4.2	99	31.5	4.3	92	31.0	4.1	.76	.451
HOME											
Cognitive	184	96.1	15.9	94	96.6	15.6	90	95.5	16.1	.45	.655
Emotional	169	96.8	15.3	89	96.3	15.6	80	97.2	15.1	-.38	.708
PIAT											
Math	193	87.7	11.6	97	88.7	11.9	96	86.7	11.2	1.17	.242
Reading Recg.	189	89.1	14.1	96	90.7	13.2	93	87.4	14.9	1.63	.105
Reading Comp.	183	87.4	14.2	93	89.6	14.5	90	85.2	13.7	2.11	.036*

*$p < .05$.

Child Self Esteem and Academic Achievement

This research proposed that there would be a significant positive correlation between child scholastic self esteem and child academic achievement. As predicted the Pearson correlations, which are presented in Table 3, show that there were significant, although modest, correlations between scholastic self esteem and reading comprehension, math and reading recognition achievement tests, ($r = .21$, $r = .17$, $r = .16$, respectively).

This research also proposed that there would be a significant positive correlation between child global self esteem and child academic achievement. The correlations support this hypotheses suggesting that children with higher global self esteem were more likely to have higher PIAT math and reading recognition scores . The relationship between global self esteem and reading comprehension scores did not however reach significance, ($r = .13$, n.s.).

Child Self Esteem and Maternal Self Esteem

This research proposed that child scholastic and global self esteem would be significantly and positively correlated with maternal self esteem. Contrary to predictions, neither scholastic self esteem nor global self esteem were significantly correlated with maternal self esteem (see Table 3).

Child Self Esteem and Maternal Educational Expectations

This research proposed that there would be a significant positive correlation between scholastic self esteem and maternal educational expectations. As predicted children with higher scholastic self esteem also tended to have

Table 3

Zero Order Correlations: Predictor and Outcome Variables

	1	2	3	4	5	6	7	8	9
1. Maternal Self Esteem	1.000								
	.								
2. Scholastic Self Esteem	.012	1.000							
	n.s.	.							
3. Global Self Esteem	.021	.395	1.000						
	n.s.	.000	.						
4. PIAT/Rdg. Comprehension	.155	.208	.129	1.000					
	.044	.005	n.s.	.					
5. PIAT/Math	.198	.172	.028	.556	1.000				
	.008	.017	.001	.000	.				
6. PIAT/Rdg. Recognition	.196	.158	.157	.799	.519	1.000			
	.009	.030	.031	.000	.000	.			
7. HOME/Cognitive	.258	.053	.026	.214	.185	.222	1.000		
	.001	n.s.	n.s.	.005	.013	.003	.		
8. HOME/Emotional	.209	-.030	.101	.086	.195	.144	.288	1.000	
	.009	n.s.	n.s.	n.s.	.012	n.s.	.000	.	
9. Maternal Expectations	.199	.168	.133	.212	.307	.217	.352	.221	1.000
	.006	.020	n.s.	.004	.000	.003	.000	.004	.

mothers who had somewhat higher educational expectations of them, (r=.17) (see Table 3).

This research also proposed that there would be a significant positive correlation between global self esteem and maternal educational expectations. Contrary to predictions however, high global self esteem was not indicative of higher maternal expectations, (r = .13).

Given that the relationship between educational expectations and self esteem is non-linear, an analysis of variance was run to examine specific differences between groups. The analysis of variance showed that there were significant differences between the scholastic self esteem, $F(4,184) = 3.62$, $p < .01$, and global self esteem, $F(4,185) = 2.84$, $p < .05$, levels of children with respect to mother's expectations of them. Post hoc analysis revealed that students whose mother's expected them to complete high school or only receive a partial college education had significantly lower mean global and scholastic self esteem scores than those students whose mothers expected them to receive a college degree. These results suggest that a child's scholastic as well as global self esteem level may be influenced by maternal expectations (see Table 4).

These results should be used with caution however. The bigger picture shows that students who had mothers who expected them to receive a college degree had statistically significant higher mean self esteem levels (M = 17.48, SD = 3.32), than their counterparts whose mothers expected them to either

Table 4

One Way Analysis of Variance for Scholastic and Global Self Esteem by Maternal Educational Expectations

Predictor Variable	df	M	SD	F	p
	Scholastic Self Esteem				
Leave High School	(4,184)	15.40	5.08	3.62	.007**
Complete High School		15.05_a	3.74		
Some College Education		14.41_a	4.6		
Complete College		17.48_b	3.32		
Post College Education		16.0	2.76		
	Global Self Esteem				
Leave High School	(4,185)	17.60	5.46	2.84	.026*
Complete High School		18.95_c	3.92		
Some College Education		18.72_c	4.16		
Complete College		21.09_d	2.92		
Post College Education		20.67	3.01		

Note. Predictor variables were divided at the mean to form low and high scoring groups. Means with different subscripts differ significantly at $p < .05$. Subscript$_b$ indicates that the mean scholastic self esteem scores for these groups differ significantly from the mean scholastic self esteem score of the group with a subscript$_a$. Subscript$_c$ indicates that the mean global self esteem scores for these groups differ significantly from the mean global self esteem score of the group with a subscript of $_d$. *$p < .05$, ** $p < .01$.

finish high school (M= 15.04, SD = 3.74) or receive a partial college education (M = 14.40, SD = 4.26). These findings may lead to premature conclusions which imply that higher educational attainment (ie: college) is indicative of higher self esteem levels and lower educational attainment (ie: high school) is associated with lower self esteem levels. A closer examination of the mean scores however reveals that students whose mothers expected them to only finish high school in fact had higher global and scholastic self esteem levels than students whose mothers expected them to receive a partial college education (see Table 4). These varied findings will be discussed in greater detail.

Child Self Esteem and Home Environment

This research proposed that there would be a significant positive correlation between scholastic self esteem and HOME environment scores. However, neither cognitive or emotional home scores were significantly correlated with scholastic self esteem (see Table 3).

This research also proposed that there would be a significant positive correlation between global self esteem and HOME environment scores. High global self esteem was not however indicative of more cognitively stimulating home environments or more emotionally supportive home environments (see Table 3).

Relationships Among Predictor Variables

Pearson correlational analyses showed that there were several significant relationships between the predictor variables. Hypothesis 9 predicted that there

would be a significant positive correlation between maternal self esteem and supportive home environments. This hypothesis was in relation to both emotionally supportive and cognitively stimulating. High maternal self esteem was associated with both higher home emotional scores (r = .21) and higher home cognitive scores (r = .26).

Hypothesis predicted that there would be a significant positive correlation between maternal self esteem and child academic achievement. Findings support this hypothesis in suggesting that mothers with higher levels of self esteem generally had children with slightly higher levels of academic achievement. The correlational values with reading comprehension, math and reading recognition scores are as follows: r = .16, r = .20 and r= .20, respectively.

Hypothesis 11 predicted that there would be a significant positive correlation between maternal self esteem and maternal expectations. This hypothesis was supported as well. Mothers with higher levels of self esteem were also more likely to have expectations that their children would stay in school longer, (r = .20).

Hypothesis 12 predicted that there would be a significant positive correlation between HOME scores and child academic achievement. Varied findings were found with regard to the two HOME subscales. Children that came from more cognitively stimulating homes generally had higher levels of academic achievement across the board (reading comprehension, r = .21, math, r = .19, and reading recognition, r = .22). Children that came from more emotionally

supportive homes only had higher math achievement levels. There were no significant relationships between the HOME emotional scores and reading achievement (see Table 3).

Hypothesis 13 predicted that there would be a significant positive correlation between HOME scores and maternal educational expectations. This hypothesis was supported. Mothers that provided more cognitively stimulating and more emotionally supportive home environments generally had significantly higher expectations of their child's level of academic attainment, (r = .35) and HOME scores (r = .22).

Hypothesis 14 predicted that there would be a significant positive correlation between maternal educational expectations and their child's academic achievement. This hypothesis was supported. Mothers that expected their children to attain higher levels of education had children that had significantly higher levels of reading comprehension scores, reading recognition scores, as well math scores (see Table 3).

Multiple Influences on Child Self Esteem

Hierarchial Multiple Regressions

Further analyses were run in order to determine the collective impact that maternal educational expectations, maternal self esteem, child academic achievement and the home environment had on child self esteem. Hierarchial multiple regressions were used to specifically examine whether the home environment and mother self esteem had an impact on child self esteem when educational expectations and academic achievement were controlled. The

results suggested that the home environment and maternal self esteem did not explain a significant proportion of the variance even when maternal expectations and academic achievement were controlled.

When examining global self esteem, the variables pertaining to education, academic achievement and educational expectations, were entered on the first step. These variables entered simultaneously accounted for 8% of the variance. When home environment and maternal self esteem were entered on the second step the F value for the change in $\underline{R}^2$ was .208 and did not reach significance ($\underline{R}^2$ change was .004).

This model did not produce significant findings when examining scholastic self esteem. When maternal expectations and academic achievement were entered on the first step they accounted for 6% of the variance. Home environment and maternal self esteem accounted for an additional 1.3 % of the variance in global self esteem (F for change in $\underline{R}^2$=.61, n.s.)

Such findings suggests that the four predictor variables overall do not explain a significant portion of the variance in the model when examining child scholastic or global self esteem.

Multiple Positive Environmental Influences on Child Self Esteem

The cumulative index of Multiple Positive Environmental Influences Index for Children (MPEIC) assessed whether the multiple positive influences of the predictor variables are better indicators of high self esteem than single factors. The percentages of children at each level of the MPEIC index are presented in Table 5.

Table 5

Multiple Positive Environmental Influences Index for Children (N=208)

Cumulative Index Scores	Percentage Of Children
0	13.0
1	10.6
2	11.5
3	14.9
4	13.0
5	13.0
6	7.7
7	6.3
	100.00

Children with high global self esteem and high scholastic self esteem were identified. Positive effects of the presence of multiple cumulative influences on self esteem are presented in Figures 2 and 3. There were no significant differences between the global or scholastic self esteem levels with regard to index scores (chi-square statistic was 3.78, n.s and 4.61, n.s respectively). These results indicate that the self esteem levels of children who have mothers with high self esteem, come from supportive environments, have high academic achievement levels and mothers who expect them to attain post high school educations are not significantly different from those children who do not have any of these factors present in their lives. Forty eight percent of students that did not have any of the positive influences had high levels of global self esteem and 62% of the students that had all seven had high levels of global self esteem. (see Figure 2).

When comparing the scholastic self esteem of this sample, a little over forty percent of children with an index score of zero still had high levels of scholastic self esteem (40.7). Similarly 61.5% of children with an index score of 7 had high global self esteem (see Figure 3).

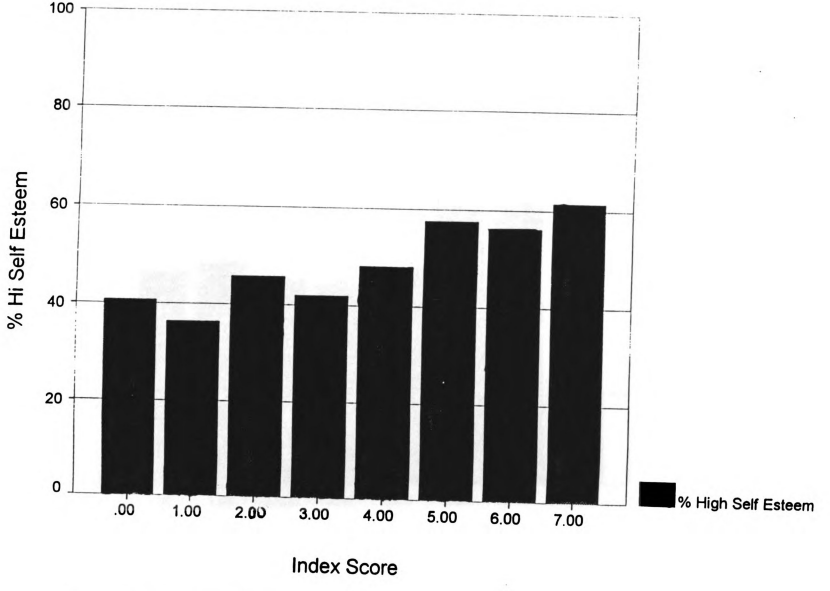

Figure 2. Multiple positive environmental influences on child scholastic self esteem

% Hi Self Esteem
100
80
60
40
20
0
.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
Index Score
% High Self Esteem

Chapter 5

DISCUSSION

The overarching purpose of this study was to answer 5 research questions:

1. Do students with higher self esteem tend to have higher levels of academic achievement?
2. Do students with higher self esteem tend to have mothers with higher self esteem?
3. Do students with higher self esteem tend to have mothers that have higher educational expectations of them?
4. Do students with higher self esteem tend to come from more emotionally supportive and cognitively stimulating home environments?
5. Are maternal self esteem, maternal educational expectations, home environments and academic achievement collectively significant predictors of child self esteem?

The answers to these questions are addressed independently.

Child Self Esteem and Academic Achievement

As hypothesized, students with higher levels of self esteem tended to have higher levels of academic achievement. This was particularly true with regard to

scholastic self esteem. Students who viewed themselves as competent in the academic domains were in fact high academic achievers, in math and both reading areas.

Students with higher global self esteem levels also tended to have higher levels of academic achievement than their counterparts with lower self esteem. Reading comprehension however, was the only area in which the scores did not differ significantly when comparing students with high and low levels of self esteem.

In essence, children who were in fact high achievers not only had high levels of self esteem in the academic domain, but thought highly of themselves in general domains of self esteem as well. This finding supports other research which has shown that students with high levels of self esteem also have high levels of academic achievement (Battle and Blowers, 1982; Kershner, 1990; Liu, Kaplan and Risser, 1992).

Child Self Esteem and Maternal Self Esteem

The present study also found that children with high levels of self esteem (both global and scholastic), were not more likely to have mothers with high levels of self esteem than their counterparts with low self esteem. As previously mentioned the numbers of studies which examine this relationship are few. Those who have (Coopersmith, 1967; Montgomery, 1994; Rosenberg, 1965; Stone, 1984) have found that how mothers feel about themselves impacts their behavior, parenting skills, perceptions and appraisals and can in turn affect their child's self concept (Stafford and Bayer,1993). Such findings make sense

in light of results of this study. Although maternal self esteem was not directly related to child self esteem, it was however related to several other variables. The implications of the relationship between maternal self esteem and the home environment, educational expectations and child academic achievement will be discussed later in further detail.

Child Self Esteem and Maternal Educational Expectations

The most striking differences were in relation to the influences maternal expectations had on self esteem. In examining both scholastic and global self esteem, students who had mothers who expected them to receive a college degree had significantly higher self esteem levels than their counterparts who had mothers who expected them to either receive a high school diploma or only a partial college education. This finding supports the literature which suggests that children internalize significant others' perceptions and expectations, which helps to formulate their own self concept (Finn, 1972; Sherwood, 1965; Staines, 1958).

Initial examinations of such findings however, might lead researchers to believe that the further mothers expected children to go in school, the higher the children's scholastic and global self esteem. This is only partially true. Although mothers who had expectations of a college degree for their children generally had children who also had higher scholastic and global self esteem levels, a closer examination of the actual mean scores showed that mothers who had expectations of a partial college education for their children had children with the lowest scholastic self esteem mean scores and the second lowest global

self esteem mean scores when compared to students whose mothers expectations included dropping out of high school or completing school only up to 12th grade. In examining the higher end of the educational continuum, children whose mothers expected them to receive a post college education had lower levels of self esteem than children whose mothers expected them to just receive a college degree.

A plausible explanation for these findings could be the incongruity that exist between a child's actual level of ability and the mothers expectation. As proposed by researchers (Harter, 1988; Luster and McAdoo (1995), Rosenberg, 1965), the support and perceptions that significant others offer to children is influential in relation to the way that children perceive themselves. This research proposes that the lack of linearity that exists between levels of self esteem and educational expectations are due to the incongruity that exist between optimal and realistic expectations. Optimal expectations would include those that a mother may have for her child that are out of reach or unattainable. Realistic expectations include those that given the child's circumstance and abilities are obtainable. For example, if a child has set goals and has expectations for him or herself based on his or her abilities (realistic expectations), his or her inability to meet up to his or her mother's expectations (optimal expectations) may cause lowered levels of self esteem (Liu, Kaplan and Risser, 1992).

Another explanation could be that the attainment of a degree or a diploma is viewed as a definitive goal, which implies the expectation of completion of a

given academic level. Partial college education may suggest uncertainty on the part of the mother and could imply the mothers' ambiguity with regards to her child's ability to complete a given academic level whether it be high school or college.

Such findings have great implications for the definitions and use of educational expectations and attainment as measured on a hierarchy. The assumption that higher levels of educational attainment are always equated with being "better", shows researcher bias. The further the mother expects the child to go may be relative to the child's ability or whether the family values education. Given that these results suggests that a mother's expectations may speak more to her perceptions of her child's ability to complete a given academic level, perhaps the academic continuum should define completion of an academic stage (ie: college or high school) as a high expectation and non-completion as a low expectation.

Child Self Esteem and The Home Environment

Children with high self esteem were not more likely to come from more emotionally supportive or cognitively stimulating home environments than their counterparts with low self esteem. Staines (1958) contends that the concept of self and self esteem is learned from the child's experiences in the school as well as the home. One interpretation of this non-significant relationship could be that how emotionally supportive or cognitively stimulating a home environment is does not directly influence how a child feels about him or herself. These factors were however found to be related to how a mother feels about herself,

how well the child does in school and what educational expectations the mother has for her child. This may imply an indirect relationship between the home environment and child self esteem. This possibility is discussed in the following section.

The Relationship Amongst Maternal Self Esteem, The Home Environment, Maternal Educational Expectations and Child Academic Achievement

Although no direct significant relationships were found to exist between home environment and child self esteem and maternal self esteem and child self esteem, two important notes should be made regarding the relationships amongst the independent variables.

First, although no direct significant relationships were found between child self esteem and the home environment, as hypothesized, there were significant positive correlations between the home environment and maternal expectations, and between the home environment and some portions of child academic achievement (see Table 3). As previously noted, maternal expectations and academic achievement are in fact related to higher levels of child self esteem. Thus, although there is not a direct link between the home environment and self esteem, this evidence may be indicative of how maternal expectations and academic achievement serve as mediating variables between the home environment and child self esteem.

Secondly, although maternal self esteem is not directly related to child self esteem, a mothers' positive feelings about herself is not only an indicator of a more a cognitively stimulating and emotionally supportive home environment,

but of higher child academic achievement and higher educational expectations on the part of the mother. The latter two variables (high academic achievement and high educational expectations), are predictors of high self esteem in children. Moreover, mothers that do in fact have higher educational expectations of their children not only have higher levels of self esteem themselves, but their children have higher achievement levels, higher scholastic self esteem and appear to foster more supportive home environments. These relationships warrant further investigation as they may suggest that although there is not a direct relationship between a mother's self esteem and her child's self esteem, there may be an indirect effect.

Multiple Positive Influences on Self Esteem

Researchers have suggested that self esteem is a multifaceted construct which is influenced by a combination of factors (Rosenberg,1979; Harter, 1990; Luster and McAdoo, 1995). The ecological model, which is the theoretical base for this present research, assumes an interdependent and reciprocal relationship between systems (Bronfenbrenner,1989; Thomas,1992). The present analysis reveals that collectively these variables do not explain a large portion of the variance in child self esteem. Further analysis examining whether the number of positive influences in a child's life collectively cultivate high self esteem levels was examined as well (Luster and McAdoo, 1995). The results from the MPEIC suggest that with this sample of students, cumulative positive influences on self esteem do not result in significantly higher levels of self esteem. Children who had mothers with high self esteem and high educational

expectations of them, who came from emotionally supportive and cognitively stimulating home environments and who were high academic achievers, were not more likely to have significantly higher levels of self esteem than their counterparts who did not have any of these positive influences in their lives

Although no significant differences were found, the moderate but positively skewed direction of self esteem scores, (as index scores increase from 0 to 7) is the trend that would have been expected. The low association between the predictor variables and child self esteem, is a plausible explanation for the lack of differences.

Harter's (1990, 1986b,1983 and 1982) theory, which was adapted from the works of both James and Cooley, proposes that high levels of self esteem are influenced by both whether the child holds performance in a given area in high regard and with whom the child compares him or herself with when assessing his or her own competencies. Neither of these assessments is available in this dataset, but could offer additional explanations for the lack of difference.

In conclusion, this study found that children that had higher perceptions of their academic ability were in fact high academic achievers and had mothers that expected them to attain higher levels of education. Children with high global perceptions had higher math and reading recognition scores and also had mothers that were more likely to expect them to receive a college degree. Although children with higher levels of self esteem did not necessarily tend to have mothers with higher levels of self esteem or come from more supportive home environments, significant relationships amongst the predictor variables

suggests that there may be indirect relationships between child self esteem and these variables and warrants further investigation. The benefits of multiple positive influences on self esteem were not evident with this sample of students but warrants further research.

Limitations

There are several limitations to secondary data analysis. Some of the limitations pertaining to this study include the over-sampling of African American and Hispanic families, the high representation of low income families and the young ages of the mothers (no mothers had reached the age of 30 when this data was collected, leaving no room for many factors which may be specific to older mothers). The results of this study are therefore not meant to be representative of all children receiving special education services and should not be generalized

Another limitation includes the inability to compare the self esteem levels of children with other predictor variables which the literature suggest influence self esteem levels. These include placement (ie: mainstreamed or self contained), labeling (specific diagnostic labels); who the child uses as a reference group (self esteem levels may be very different for students who are comparing themselves to children who are in traditional or gifted classrooms as opposed to comparing themselves with peers in their special education classes); how supportive the child perceives their parents and home environment to be (the HOME does not assess the child's perceptions) and the type of school that they attend. These are important pieces of information that would add to the

relevance of these results.

Caution should also be taken against using these results to draw conclusions with regard to child perceptions. For instance, whether a child perceives their home environment to be supportive and affirming or whether a child's personal educational expectations meet those of their parents are important factors which are beyond the scope of this research.

Despite these limitations, these results have clear implications for researchers who value the importance of examining the self esteem of all children, particularly children with special needs, as a multidimensional construct which is influenced by a wide array of environmental factors.

Implications

Given the increased percentages of children that are receiving special education services and their varied backgrounds, researchers are beginning to move away from solely focusing on school factors as explanations of self esteem. Researchers appear to be moving towards considering a wholistic perspective when examining children with special needs (Stone, 1984). This present study uses this perspective by placing children not only in the context of the school system, where they spend eight hours of their day, but also considering the context of the family where they spend the formative years of their lives prior to entering the educational system, and a large portion of the remainder of their day once they come home from school. The findings of this study have major implications and provide researchers and practitioners alike with a basis from which to move forward and to explore other variables in a

child's environment that may influence self esteem.

Linkages Between the Home and School.

Given the relationships that exist between education and self esteem and parents and self esteem, educators should foster the relationship between the home and the school. Although the home has often been viewed as off limits to teachers, these results suggests that there are some significant relationships not only between the home environment and children's academic achievement but how mothers feel about themselves and the educational expectations they hold for their children. Teachers should be encouraged to not only discuss childrens' needs with parents, but to offer suggestions as to how parents can supplement learning in the home environment with the goal of enhancing achievement and self esteem levels. Parents should also be included and made aware of the importance of their involvement not only in the home but in the school as well. With the passing of Public Law 99-457, which mandates that parents be involved and included in the development of their child's individualized family service plans (IFSP), it is evident that the importance of a systemic approach to working with children with special needs has been recognized on a federal level and must be put into practice on a local level (Mowder, Harvey, Moy and Pedro, 1995).

Parental Influences.

Parent education is also a key component in this research. Teaching parents that nurturing, loving and enhancing not only their child's, but their own self esteem is just as important in a child's development as providing basic needs.

The majority of the mothers in this sample had their children before the age of 19 (52.7%). With the increasing numbers of women giving birth at earlier ages, teaching teenagers parenting and coping skills before they become mothers, as a preventive measure as opposed to an intervention, may in turn facilitate positive outcomes for children.

This research suggests that maternal expectations influence child self esteem. This finding implies that it is equally important to teach parents how to modify their own expectations to meet the ability levels of their child. Given that their child has special needs which may prevent them from developing and learning at levels comparable to other children their age, having realistic expectations of their child's abilities is important. Encouraging their child's successes, while also understanding and supporting their child's failures, may be a vital key in bolstering high levels of self esteem in a child.

Researchers should also be careful of researcher bias when measuring educational expectations. Mothers who have expectations of lower academic attainment (ie: high school as opposed to college), should not automatically be viewed as having low expectations of their child. Expectations are relative and may be based on values, child ability or mothers own perceptions. A suggestion for future research is that the respondent be given the liberty of defining the level of their own expectations. In other words the respondent should be able be the one who defines whether they consider their expectation to be high or low. This would ensure the relative self defined explanation of expectations and guard against researcher bias in assuming that low educational attainment is

associated with low expectations levels.

Conclusions

Based on these findings, researchers can move forward with a new perspective on how the self esteem of children is influenced. Educational factors are not the only influences. Although there are moderate associations, maternal influences are also important factors in their lives. Again, since this research does not propose a causal model, researchers are encouraged to keep in mind that as Liu, Kaplan and Risser (1992) point out, self esteem actively influences and is influenced. Future studies are challenged by this present research to move beyond the limited scope of the educational system when searching for answers related to a children's self esteem. The challenge comes in broadening the scope of the lens to include the many systems that influence children's development for the other 16 hours of a school day.

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