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THE EFFECTS OF THE MAINSTREAMING EXPERIENCE ON THE SELF-CONCEPT OF PHYSICALLY HANDICAPPED YOUNG CHILDREN.

WAYNE STATE UNIVERSITY PH.D. 1979

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THE EFFECTS OF THE MAINSTREAMING EXPERIENCE ON THE SELF-CONCEPT OF PHYSICALLY HANDICAPPED YOUNG CHILDREN

by

Anne Porter Jaworski

A DISSERTATION

Submitted to the Office for Graduate Studies,
Graduate Division of Wayne State University, Detroit, Michigan
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for the degree of
DOCTOR OF PHILOSOPHY
1979

MAJOR: EDUCATIONAL EVALUATION AND RESEARCH

APPROVED BY:

Advisor Date

[Signatures]
DEDICATION

This dissertation is dedicated to Merland D. Porter and Jan Louis Jaworski.
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The assistance and support of many people contributed to this work.

Foremost, I want to thank Dr. Maureen Sie my chairperson for her support, encouragement and guidance throughout my doctoral program. Thanks are given also to my other committee members, Dr. Donald Marcotte, Dr. J. F. Campbell, and Dr. Joseph A. Labuta.

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CHAPTER I

STATEMENT OF THE PROBLEM

This chapter provides the reader with a brief background on the topics of mainstreaming, self-concept as related to school achievement, the development of self-concept and self-concept as related to the percepts of significant others. Also included is the purpose of the present study, a description of the problem, the research hypotheses, and the limitations of the study.

Mainstreaming is a term that has become significant in the lives of young handicapped children, their parents and their teachers. With respect to handicapped children, mainstreaming refers to the instructional and social integration of exceptional children with normal peers based on a continually reevaluated individualized educational planning and programming process. The concept of mainstreaming represents a significant change in attitude toward handicapped people in our culture. Where formerly, handicapped people were commonly separated from the mainstream of society, today the overriding goal for handicapped people is to incorporate them into the dominant social system. (Lance, 1976) In order to accomplish this goal, it is felt that handicapped people should be integrated as early as possible into the mainstream of society. Public education is seen as the predominate vehicle for this integration, or mainstreaming, process. This early
integration is intended to provide early social experience between handicapped and non-handicapped children and to insure that handicapped children have educational opportunities equal to those of their non-handicapped peers.

Included in the planning and programming process for the integration program is the clarification of responsibility attributed to regular and special education administrative, instructional and supportive personnel. (Kaufman, Gottlieb, Agard and Kubic, 1975)

More specifically, with respect to education, the goal of mainstreaming is to provide full educational opportunities to all exceptional children, a goal not without merit. This goal is justified from a historical standpoint by the changing attitude of educators toward their responsibility for the treatments provided exceptional children. Special education, or education of the exceptional child has developed through three successive stages:

1. Treatment through segregation and restriction of resources for survival appropriate for people called different.

2. Caring for people regarded as different by providing resources required for their physical existence.

3. Instructing such people so that they may be incorporated into existing, dominant social systems. (Heiny, 1971)

In terms of goals with respect to the quality of life for the exceptional person, the progression through these stages has had a
major effect. In the nineteenth century such people were simply put away, out of sight and out of mind, with little recognition of their existence as human beings. As there was more concern for the identification and education of exceptional people, those with like handicaps were placed together in residential institutions and later, day schools and classes for the purpose of more effective educational practices were established.

At this stage, while the emphasis was on a practical education and "happiness," exceptional people still found themselves very much segregated from the mainstream of life. However, this caring attitude on the part of the educators led to a reexamination of the curriculum for the exceptional person and to a definite movement towards individualized instruction. From individualized instruction, the next move was to develop programs which would incorporate the exceptional person into the dominant social system, i.e., mainstreaming. (Lance, 1976)

Currently, there is legislation insuring education for all exceptional children. Public Law 94-142, the Education for All Handicapped Children Act of 1975, defines the following purposes:

1. To assure that all handicapped children have available to them a free and appropriate public education.

2. To assure that the rights of handicapped children and their parents are protected.

3. To help states and localities provide for the education of all handicapped children.

4. To assess and assure the effectiveness of efforts to educate handicapped children. (Irvin, 1976)
It is the fourth goal that is of interest. To provide legal justification and funding for a program is quite different than to assume the intent of the law being carried out, as opposed to a superficial facsimile. Mainstreaming is far more than placing a child into a nonhandicapped classroom, prescribing a program of individualized instruction and dividing responsibility among various personnel.

Mainstreaming requires social change, changes in attitudes of regular classroom teachers and administrators, children, and parents of children in the regular classrooms, parents of exceptional children and teachers of exceptional children, not to mention the general population. The mainstreamed child is the agent of change, the pressure point. The relevant question is, what is happening to the exceptional child as he is mainstreamed into a regular classroom setting? What variables are significant in assessing the child's growth and development? Is it necessary to wait for twenty to thirty years to evaluate the long term effects of a program of such great magnitude and potential impact, or can "leading indicators" be identified which will help to predict long term effect and moderate possible negative effects along the way?

Self-concept has been long recognized as a relatively stable personality construct that is strongly related to school achievement and self-actualization. Who the child believes he is and the unique traits he believes himself to possess has an important role in the process of education because how a student looks at himself often has
an effect upon how he looks at school and how he performs in the classroom. (Spiegler, 1967) David Elkind proposes that there is a contemporary over-emphasis on intellectual growth to the exclusion of the personal-social side of development. He believes that many problems in childrearing and education could be avoided if concern for a child's achievement as a student were balanced by an equally strong concern for his feelings of self-worth as a person. (Elkind, 1972) If Elkind's concerns are valid for the nonhandicapped student, the situation of the exceptional child may be even more critical because he is in competition in the world with people not having the physical, intellectual or emotional disadvantages he may have no hope of overcoming.

A study in Minnesota by Carmezy looked at examples of competent children from the slums, children who had been exposed to considerable amounts of stress, yet continued to master the situation. Among other characteristics these children seemed to have a sense of their own power, rather than a feeling of powerlessness.

However, Ozehosky and Clark in introducing their article "Children's Self-Concept and Kindergarten Achievement" state that there is little empirical evidence to support the contention that self-concept plays an important role in the education process. Many possible explanations are listed in the Ozehosky and Clark article for this apparent lack of support. The explanations include methodological difficulties in the measurement of self-concept, relative lack of self-concept studies of young children, little research in the origins and development of the "child's self" and limited research on the
processes relating self-concept to behavior. The Ozehosky, Clark study however gave support to self-concept having functional utility at the kindergarten level. (Ozehosky, 1970)

Further, the Ozehosky and Clark study, using two types of measurement instruments -- a verbal sentence completion instrument, the Quantified Self-Concept Inventory, and a Non-Verbal Protoral Self-Concept Scale, the U-Scale -- gave support to Perkins and Shannon in their 1965 study. The results showed that verbal self-report approaches were not suitable for assessing self perceptions. However, the pictorial identification techniques had a novelty that quickly aroused interest and attention in young children.

A study by White and Bashaw in 1971 examined the hypothesis that self-esteem, as measured by the Self-Social Constructs Scale would be significantly related to identification with mother, father and teacher. The hypothesis that self-esteem is significantly related to identification with adult models was partially supported. The study, which was done on kindergarteners and first graders, indicated that the child's attempt to imitate or copy behavior of mother, father, teacher or friends was perceived as opposed to his pride and self-esteem. Students looked upon any proximity to adults as dependence upon those adults and felt that such closeness would not fit in with individual pride in one's self.

A poor self-concept score should correlate with an overly dependent child-parent relationship. Such a relationship may not allow a child to establish a strong sense of self separate from the parent.
Further, in such a situation a child may also have difficulty establishing a sense of his own power as described in the Carmezy article on competent slum children. This overriding sense of power may fuel the determination necessary to help children survive difficult situations which in turn would reinforce the feeling of power and competence.

How Does Self-Concept Develop?

Communication appears to be a primary factor in the development of self-concept. Carolyn Emrick Massad describes three possibilities relevant to the development of self-concept:

1. The self-concept may be learned from direct experience or perception of the physical world without any social mediation.
2. The self-concept may be socially mediated without language.
3. The self-concept may be socially mediated and the mediation is through language.  
   (Yamamoto, 1977)

The kind of learning involved in the development of self-concept is a function of the age, physical condition and environment of the child. The infant learns primarily through direct physical experience or perception of the physical world with social mediation through non-verbal communication increasing with age. Factors that influence non-verbal learning include body language, concepts of time and space, play activities, laughter and crying, and observable behavior. All of these factors involve the communication of information about self and
the world to the infant and young child and contribute to the child's concept of himself as a part of and differentiated from the world around him.

Yamamoto describes self-concept as:

the composite of all the descriptions, verbal, pictorial, or otherwise, of me.... What is to be remembered is that the self-concept is a composite, but imperfect representation of the self. The self-concept contains all kinds of descriptions of the objective me, not only the portraits rendered by the individual, but also his impressions of his portraits done by either himself or someone else. This feature (the self-reflexiveness of any symbolic process) often leads to gross mis-interpretation of the self, the whole being, even by the very person in question... The self-concept, therefore, is not the same as the self. (Yamamoto, 1972)

A study by White and Human in 1976 examined the relationship of self-concept of 3, 4 and 5 year old children, with mother, father, and teacher percepts. The White and Human study provides the basis for the present study. The White and Human study found that there was no correlation between children's self/social constructs on the "I Feel-Me Feel" Self-Concept Inventory and the percept scores of mother, father, and teacher.

Children's scores were very stable. Although uncorrelated with the children's scores, adult percepts of the children's self-concept were highly correlated among themselves. The stability of the children's scores and the high correlation among adult percepts led White and Human to believe that there was something meaningful in the lack of correlation between child and parents, but marked relationships
between and among adults. White and Human hypothesized that advantaged caregivers in campus schools and teachers in such schools do not recognize the self/social feelings of the children, at least as measured by a particular instrument. Caregivers and teachers appear to share common adult criteria of young children's self/social constructs, but these criteria may be quite different from those of the children to 5 years of age.

The present study incorporated the model and the instrument used in the White and Human study to examine self-concept scores and primary caregiver's percept of self-concept scores of physically handicapped young children in mainstreamed and segregated educational settings and of their non-handicapped peers.

Specific Background

Statement of Purpose

The purpose of this study was to examine the degree and directions of differences in the self-concept scores of physically handicapped young children in mainstreamed educational settings, physically handicapped young children in segregated educational settings, and non-handicapped children of similar ages as the handicapped children. The present study also examined differences in primary caregiver percepts of the self-concept scores of the children involved in the study.

Significance of the Problem

There is a need for further knowledge on the development of self-concept in young children and its relationship to the percepts of the
significant persons in the young child's life. If it is true that a child's attempt to imitate or copy the behavior of the mother, father, teacher, or friends is perceived as dependence which is opposed to the child's pride and self-esteem, the physically handicapped young child should demonstrate a lower self-concept score than the normal child. Common sense would support the notion that a handicapped child would tend to have a less positive self-concept, or lower self-concept score than a normal child because he is less capable of the "normal" range of activities which enhance self-concept and in reality has less control over his life than a non-handicapped child. However, if self-concept in the physically impaired child develops as a function of direct experience, or perception of the physical environment and social interaction, with and without language, then support can be given to early mainstreaming experience plus special education intervention. The child in the mainstreamed special education program should be less dependent on his primary caregiver and have a broader range of experiences with a greater number of people. Furthermore, if self-concept is socially mediated, then the most dependent child with the fewest contacts has the least information from which to construct his self-concept. This child would be likely to adopt the percept of his primary caregiver as his self-concept, no matter how inaccurate that percept may be.

More information is needed on the development of self-concept in socially restricted situations. Research could also provide information to use in decision making in early intervention mainstreaming models.
Research Hypotheses

1. Physically handicapped children will have lower self-concept scores than non-physically handicapped (normal) young children.

2. Primary caregivers' percepts of their physically handicapped child's self-concept will be lower than the percepts of the self-concept of non-physically handicapped children as given by their primary caregivers.

3. Physically handicapped children in special education (only) programs will have lower self-concept scores than physically handicapped children enrolled in mainstreaming situations in addition to their special education programs.

4. Primary caregivers' percepts of their physically handicapped child's self-concept will be lower for children in special education (only) programs than for physically handicapped children enrolled in mainstreaming situations in addition to their special education programs.

Limitations of the Study

1. The validity of the "I Feel-Me Feel" Instrument has not been determined.

2. The results of this study may relate only to the 3 to 5 year old age range.

3. The results of this study relate only to population sampled.
CHAPTER II
REVIEW OF RELATED LITERATURE

The review of the literature related to this study on self-concept and the physically impaired child is organized into five categories: (1) Mainstreaming; law, problems, practices, (2) Self-Concept Development, (3) Self-Concept Measurement, (4) Self-Concept Development in the Physically Handicapped, (5) Mainstreaming and the Physically Handicapped Child.

Mainstreaming; Law, Problems and Practices

Many people have been important in the development of services and education for the handicapped in the United States. A brief historical survey would include: Rev. Thomas H. Gallaudet who founded the Connecticut Asylum for the Education and Instruction of Deaf and Dumb Persons in 1817, the first permanent school for the education of deaf mutes in this country; Dr. Samuel Gridley Howe, appointed as the first director of the New England Asylum for the Blind in 1831; James B. Richards, assigned as teacher of an experimental school for idiotic children in Boston, 1848; John Curtis named teacher of a day school for blind children demanded by parents in 1900; and in 1908, J.F. Rergart principal of new program initiated for children with defective speech. These programs, while initiated in a humanitarian attempt to provide education and training for handicapped children, were representative of the early philosophy of treatment of the handicapped through
segregation. A radically different philosophy is anchoring current goals for the education of the handicapped today. Programs are presently being developed which are intended to incorporate the handicapped person into the dominant social system. (Lance, 1976)

Although Public Law 94-142, The Education for All Handicapped Children Act was signed into law by President Ford in November of 1975 it is not a product of this decade alone. Lance reports that the 1930 White House Conference on Children and Youth also called for full services to all children. Cain (1948) reports a U.S. Office of Education Publication, "Needs of Exceptional Children" listed the following as needs as early as 1944:

1. Equal opportunity for learning.
2. Provisions for physical and medical services.
3. Recognition that the public schools are the logical agency for developing an educational program for crippled children.
4. Provision for special programs with opportunities for contacts with normal children.
5. Meeting the needs according to type and degree of disabling conditions with adequate provision for the instructional needs of each group.

Martin (1974) describes the general conditions associated with segregated societal institutions as cruel and dehumanizing. In support of the possible benefits of mainstreaming handicapped children in regular classrooms, Haring and Krug (1975) reported that there are many high risk children who are capable of making normal growth in regular classrooms. Calhoun and Elliott (1977) found mainstreamed emotionally
impaired children had higher achievement and self-concept scores than their counterparts in segregated classrooms. Guralnick (1976), provides the following as "positively oriented rational" in support of the integration process:

1. Increased understanding and sensitivity to individual differences that non-handicapped children, their parents and teachers can develop with involvement with handicapped children.

2. Benefits to teachers from the opportunity to observe mixed groups of children at various developmental levels.

3. Benefits to handicapped children from observing and interacting with more advanced peers.

Martin (1974) describes the main goal of mainstreaming as increasing the positive interactions between handicapped and non-handicapped learners.

The Education for All Handicapped Children Act of 1975, Public Law 94-142 mandates a national commitment to the education of all handicapped children in the "least restrictive environment." The least restrictive environment is among the critical stipulations which must be adhered to by state and individual school districts. It is a concept which recognizes that handicapped children have a wide range of needs which vary in intensity and duration, making necessary a continuum of possible settings. Basic in the intention of the law however, is the understanding that handicapped children will be placed with non-handicapped children to the maximum extent possible, the limiting factor being the child's special needs not the services currently available. Services must be developed in support of the child's needs. Public Law 94-142
also states that each state must develop a comprehensive personnel program with provisions for inservice and preservice training for teachers and an information dissemination plan (Milbauer, 1977). Abeson, Bolick, Hass (1975) provide information to aid in meeting the requirements set forth in Public Law 94-142.


While optimism is high for the success of the shift to educating the handicapped in the least restrictive environment there are problems which must be recognized and treated. Martin (1975) warns that we must carefully investigate the effects of mainstreaming and seek the truth being careful not to bias our investigations to support our theories. This admonition rests on the fear that we are "failing to develop our approach to mainstreaming with full recognition of the barriers which must be overcome."

Lance (1976), Molloy (1975), and Martin (1974) warn that mainstreaming is far more than placing a handicapped child in a regular classroom for a few hours each day. New systems of service must be developed including an inventory of overlapping services along with a "commitment to new alliances" aimed at reducing duplication and
filling gaps in treatment and training (Molloy, 1975). Zufall (1976) sees the integration of exceptional children into regular classes as a public health problem involving the talents of many professionals. Thought must be given to the attitudes, fears, anxiety and possible rejection of the handicapped child by his non-handicapped peers and adults in the schools. Planning must also take into consideration responses of the general public outside the school to the increased integration of handicapped people in all areas of experience, not just the schools (Martin, 1974).

One of the most critical areas of concern with respect to mainstreaming is that of attitudes toward the handicapped held by non-handicapped children and adults. Zufall (1976) believes that the professional position in which one work is relatively unimportant in comparison to the attitude with which one approach the integration of the handicapped. Programs to change attitudes toward the handicapped have been developed by Haring (1956), Donaldson and Martinson (1977), Harasymin and Horne (1976) and Bookbinder (1977).

Haring (1956) found that increased knowledge concerning exceptional children was not sufficient to modify attitudes. Increase in knowledge must be accompanied by classroom experience with exceptional children. The Harasymin and Horne project reported positive changes in attitude resulting from a program that included new knowledge about the handicapped, classroom experiences with exceptional children and support from administrative and resource personnel. Donaldson and Martinson got positive changes in attitudes through the presentation of a panel.
discussion on special needs of the handicapped by obviously handicapped participants. Bookbinder has developed a curriculum for elementary school children which deals with non-handicapped children's questions and concerns with respect to reasons, visible effects, and consequences of various disabilities.

A special problem within the area of attitudes has to do with the effects of labels on attitudes of educators toward handicapped children. Combs and Harper (1967) found that the use of labels does affect the attitudes of teachers toward exceptional children and that attitudes varied with type of handicap. Labels applied to psychopathic, schizophrenic and cerebral palsied children resulted in more negative ratings than when the same children were behaviorally described and not labeled. Lilly (1975) hypothesizes that labels function in the following ways:

1. Labels ignore the interactive nature of instruction and assume that the cause of the instructional problems is in the child.

2. Labels remove the "burden of proof" for children learning from school personnel, by providing unalterable conditions in the child as reasons for repeated failure.

3. Labels provide information to the teacher which is in most cases irrelevant for instruction.

4. Labels are often not accurate and can be embarrassing to students.

The major source of information on labels and their effects is the report by Nicholas Hobbs of the Project on Classification of Exceptional Children entitled *The Futures of Children*, 1975. This project was
sponsored by nine agencies of the Department of Health Education and Welfare. The project resulted in the development of 40 recommendations covering seven problem areas; "helping parents help their children, finding and helping those children who are excluded from school, improving residential programs for children, assuring fair play in the treatment of disadvantaged and minority group children, improving classification procedures, improving organization of services to children, and gaining new knowledge." (Hobbs, 1975)

Lance (1976) conceives of exceptionality as being based on three dimensions each of which exert an interactive influence on each other; chronological age, degree of variation from the norm in education related areas, and environmental and cultural factors affecting the learners accommodation to school programs.

Abelson (1976) studied preschools' readiness to mainstream handicapped children and found the most readily accepted handicaps were language delay and mental retardation, the least desirable, confinement to a wheelchair, upper extremity problems and blindness.

With respect to solutions for problems inherent in mainstreaming, Martin (1974) suggests massive efforts to work with regular teachers both in educating them with respect to special education and in sharing their feelings and understanding their fears. Further, teachers should be provided with special assistance and materials. Zufall (1976) sets one to three handicapped children as the maximum to be mainstreamed into a regular classroom of 18 to 22 non-handicapped children. More than that may result in excessive difficulty for the teacher and/or the social breakdown of the class into handicapped and non-handicapped groups of children.
Self-Concept: Development and Effects

The self as a construct has been defined by many theorists in many ways. However, most contemporary theorists define the "self" either as "a group of psychological processes which govern behavior and adjustment," the self-as-subject, or "as an organized collection of the attitudes and feelings a person has about himself," self-as-object (Coller, 1971). Self-concept has usually been defined in terms of the self-as-object. James, Titchener, Dewey, Cooley and McDougall were among the earliest to wrestle with "self" as a psychological construct. However, this early speculation on the nature of the "self" ways overpowered in the U.S. by the behaviorists who were dominant on the psychological scene. The major early theory building with respect to self-concept was done in Europe by Freud and Adler. Other personality theories which can be considered self-psychologies include the works of Horney, Sullivan, Kardiner, Fromm, Anna Freud, and Erikson. (Coller, 1971)

Dinkmeyer (1965) provides a general definition of self-concept. "The self is one's inner world. It results from evaluational interaction with others, becoming the consistent personal perception of 'I' and 'me'. The child's perception of the reflected attitudes and judgements of those who comprise his world serves as the foundation for the formulation of the self. The self concept really is the individuals anticipation of his general acceptance or rejection in a given situation." There have been many approaches to understanding self-concept, its development and its function. In Freudian psychology,
the term most closely associated with self-concept is the ego, the part of the personality that reacts to perceived reality. For Adler, the term most closely related to self-concept is life style, or the individuality of the person, expressing himself and molding himself in an environment. (Ansbacher, 1956) When a person is in a favorable situation it is difficult to see his life style clearly. It is when a person must react to difficulty that his life style becomes observable in his behavior. Life style is the consistent movement toward the goal of a life plan. Life style and ego can be considered similar. The person's perception of reality determines his behavior more than the "actual" reality of a situation. (Ansbacher, 1956)

The phenomenological psychologists are represented primarily by Combs and Snygg and also by Carl Rogers and Kurt Lewin. To the phenomenological psychologist, all behavior is a function of the perceptual field. The perceptual field relates to the person's perception of reality. It is made up of the situation at hand including the person, at a given point in time. Therefore the self-concept would be directly related to the perceptual field. (Dinkmeyer, 1965) Helper (1954) views self-concept as a function of verbal learning. Whatever the orientation, the major theories agree that the development of self-concept is a function of the interaction between a person, a child, and his environment. It is both stable and changing. (Jerslid, 1952).

The basic direction the self-concept will take develops early. By the third year of life the self-concept is fairly well integrated.
The child has developed a general view of the world and his position in it. (Gordon, 1969) Obviously then, the parents would have the most significant effect on the self-concept of the child. However, since self-concept is dynamic rather than static, a child's siblings, peers, teachers, and society at large will also have input as to how the child sees himself. Combs (1958) suggests that whether or not a person is well-adjusted depends on the kinds of self-concepts a person possesses, implying that a person may conceive of himself in different ways for different experiences or situations. A person may have a positive self-concept for one situation and a negative self-concept for another. All of these sub-self-concepts combine and result in a general overall conception of self as worthy or unworthy, positive or negative. Combs goes on to say that self-concept is learned from the ways a person has been treated by those close to him in the process of growing up. Combs' description of the adjusted or adequate personality requires that a person

1. sees himself in essentially positive ways
2. sees himself accurately and realistically
3. is capable of accepting himself and others
4. is characterized by a high degree of identification with other people.

Spivak (1956) provides a similar set of characteristics for the self-accepting person.
How is school experience related to self-concept? Morse (1964) found a positive self-concept characteristic of children through the second grade. However, he found a sharp drop in self-concept in the third grade, continuing through the fifth grade with some recovery by the eleventh grade. Morse reports that the "school self" appears to grow gradually less positive over time and interprets this downward trend as the communication of a sense of personal failure in students. Stenner and Katzenmeyer (1976) found that one-half to one-third of all children included in their study of first and third graders evidenced more problems than expected as related to self-security, nervousness, tiredness, loneliness, worries and fears.

With respect to achievement, Purkey (1970) cites numerous examples of significant correlation between self-concept and school achievement. Bodwen (1957) found a positive, significant relationship between immature self-concept and reading and arithmetic disability. Bledsoe found a significant positive correlation between self-concept and intelligence and academic achievement in boys but not girls. He also found that self-concept and manifest anxiety correlated negatively and significantly for boys and girls at the fourth grade level.

Perkins (1958) found that teachers' perceptions of children's self concepts were, in general, significantly and positively related to children's expressed self-concept. These results are not in agreement with White and Human (1976) who found no significant relationship between teachers' percepts of children's self-concept and children's expressed self-concept. Davidon and Lang (1960) found that children's
perceptions of their teachers' feelings toward them correlated positively and significantly with their self-perception. Further, children with more favorably self-perceptions perceived teachers' feelings toward them more favorably. The more positive the children's perceptions of their teachers' feelings, the better was the children's academic achievement and the more desirable their classroom behavior as rated by the teachers. Social class position also correlated positively with achievement in school.

Gordon (1969) suggests that the experience of mastery and triumph sets the stage for better efforts in the next experience. He hypothesizes an interaction between confidence and a sense of self-worth, and cognitive and motor skills. Bodwen (1957) believes that a teacher who accepts each child as an individual worthy of himself and who helps each child in his growth toward self-realization is basic to the acquisition of an "adequate and accurate self-concept." Scheirer and Kraut (1979) found overwhelmingly negative evidence for a causal connection between self-concept and academic achievement. Further, from a behaviorist viewpoint, self-concept change may be an outcome of increased achievement with the accompanying social approval.

Gordon (1969) proposes that parents be educated in such a way that they can provide a positive affective climate and a cognitive climate that allows the child to be competent as well as feel loved. This early combination of factors is essential, in Gordon's view, to the development of adequate self-esteem.
As the child grows and develops his perception and knowledge of self grows and develops first primarily through interactions with his family, then with his school and community. If the child's school and community continue to enhance the child's feelings of competence and belonging, his self-esteem will continue to grow stronger.

**Self-Concept Measurement**

In a major work on the "Assessment of Self-Concept in Early Childhood Education", Collier, 1971 reports that there are two processes which are fundamental to the assessment of self-concept. The self or self-concept can be "inferred by direct observation of behavior as it emerges, or by an examination of the traces of behavior after it has occurred." Collier has developed a model which provides a general method of presenting five procedures by which a child's self may be assessed.

Direct observational procedures are characterized by their emphasis on overt behavior. Behavioral trace procedures are mainly directed toward the examination of the after-effects of a child's behavior and not with the direct observation of the behavior as it evolves, such as drawings made by the child or impressions made on other people by the child. Self report procedures require the examiner to ask the child to describe himself or make judgements about himself or his behaviors. This is the most common type of self-concept assessment method. Projective techniques are unlike self-report procedures in that they focus on unconscious processes rather than conscious attitudes or feelings. Combinational procedures are most usually advocated by those who view the self-concept as a complex combination of conscious and unconscious factors.
The inner circle represents the organized and differentiated self-concept. The diamond-shaped center represents the self-concept assessed by any combination of the four major procedures: Direct Observation, Behavioral Traces, Self-Reports, and Projective Techniques. Coller, 1971

Figure 1 -- A Self-Concept Measurement Model
TABLE 1
Classification Schema for Self-Concept Assessment Techniques

A. **Direct Observational Procedures**
   1. Observations in a free field
   2. Observations in selected situations
   3. Observations in contrived situations

B. **Behavioral Trace Procedures**
   1. Physical tracings
   2. Manifest and/or cloaked recollective trace reports

C. **Self-Report Procedures**
   1. Manifest and/or cloaked self-reports
   2. Reports on symbolically contrived situations
   3. Episodic recall

D. **Projective Techniques**
   1. Cued associations
   2. Cued constructions
   3. Minimally induced constructions
   4. Completions
   5. View of the stimulus through choice and/or ordering
   6. Self-expression

E. **Combinational Procedures**
   1. Observer as instrument
   2. Subjective behavioral comparisons
      (Coller, 1971)
Coller described and discussed over 50 different assessment techniques. He found that the most important difference among the tests was that their testing goals or objectives varied. Since the measures Coller described tended to assess fundamentally different things about self-concepts the results of the measures not readily comparable, although low significant correlations were obtained when self report measures were compared to direct observational procedures and behavioral trace procedures.

Combs, Soper and Courson, 1957 explored differences between "inferred self-concept" based on observation by trained observers and self report. They found no significant relationship. Combs describes the self report procedure as measuring what an individual says he is which Combs does not consider a measure of self-concept. According to Combs, how closely the self report approximates the real self-concept depends on:

1. The clarity of the individual's awareness
2. The availability of adequate symbols for expression
3. The willingness of the subject to cooperate
4. Social expectancy
5. The individuals feelings of personal adequacy
6. The subjects feeling of freedom from threat
   (Combs, Soper, and Courson, 1957)

Coller summarizes his investigation of self-concept assessment in early childhood with three observations:
1. The end results of the assessment of self-concept by the use of different assessment approaches or techniques will not necessarily be comparable.

2. Inappropriate test development vis-a-vis self-concept theory has created the need to operationally define self-concept as that that is assessed by so-called self-concept tests.

3. The bulk of self-concept tests is not very useful in the evaluation of self-concept curricula.

The Scheirer and Kraut (1979) investigation of the relationship between self-concept and academic achievement illustrates the problems involved in research connecting self-concept to other constructs. They found negative evidence for a causal connection between self-concept and academic achievement. The investigators grouped the reasons for lack of association into four categories. The first category is methodological problems, such as inadequate control groups, inappropriate outcome measures for the treatment undertaken, and lack of well-constructed, well-documented measuring instruments. A second possible explanation for the results could have been an implementation problem. Perhaps the intended program was never actually put into practice. A third, more plausible explanation could relate to inappropriate theoretical assumptions about the link between self-concept and achievement. Perhaps the educational programs did not influence self-concept and therefore there was no corresponding change in achievement. The fourth possible explanation is that the underlying theory is wrong. Perhaps the academic self-concept is a function of one's experience in the academic environment. (Scheirer and Kraut, 1979)
Crowne and Stephens (1961) trace the conflicting results of research on self-acceptance and its relationship to other personality values in part to what they describe as "neglect of several crucial psychometric and methodological principles." Among the principles they believe are routinely neglected are:

1. The unsupported assumption of equivalence of assessment procedures.
2. The absence of any clear construct level definition of the variable.
3. Failure to construct tests in accordance with principles of representative sampling.
4. Questions concerning the social desirability factor in self-report tests.

Crowne and Stephens also note that the absence of data concerning the generality of self-acceptances makes research results difficult to interpret. And finally, they believe the implications of the difference between a phenomenological approach to self-acceptance and a behavioristic approach to self-evaluative behavior have not been clearly understood. Shavelson, Huber and Stanton (1976) question the validity of self-concept construct interpretations. Problems pointed out in this study include imprecise definitions of the term self-concept, little data available on equivalence of self-concept measurement instruments and no data to test rival counter interpretations. These researchers attempt to define self-concept in more workable terms. They also provide suggestions for validation of self-concept interpretations of test scores and experimental techniques for the study of counterhypotheses.
Self-Concept Development in the Physically Handicapped

Because knowledge of the self grows through sensory experience and social experiences, or interpretations of the viewpoints of others toward the self, it is possible for the body to acquire more significance than can be functionally justified. This potential problem is particularly critical in the case of the physically handicapped person. (Wright, 1960) The major theoretical principles and positions most referenced in the psychology of disability are Adler's Individual Psychology, Schilder's Body Image, Parson's Social Role Theory and Somatopsychology. (McDaniel, 1976)

Adler's psychology emphasises social urges and individual uniqueness. Of particular interest in the study of the psychology of disability are Adler's concepts relating to striving for superiority, inferiority feelings, compensation and style of life. Most relevant in Schilder's body image theory is the "postural and tactile impressions, visual sensation, and spatial relationships of one's own body in the construction of a body concept which is an essential aspect of behavior" (McDaniel, 1976). Parson's Social Role Theory provides a link between physical disability and its resulting effects on role expectations for the individual as defined by the social structure and the values of American society. Somatopsychology has been defined as "those variations in physique that affect the psychological situation of a person by influencing the effectiveness of his body as a tool for actions or by serving as a stimulus to himself or others." (Wright, 1960)
McDaniel (1976) summarizes the developmental consequences of physical disability as presenting a different circumstance at every stage of occurrence. Further, he indicates that personality and other psychological factors appear to have unique interactive effects at various developmental levels.

Cruickshank and Dolphin (1949) suggest that the adjustment of physically handicapped children and non-handicapped children can be considered similar except in cases where the handicap functionally represents something irreparable to the child or is a factor to which acceptance is impossible. Their study of needs and fulfillment of needs indicated that both handicapped and non-handicapped children showed deviations in adjustment in the same areas.

Barker, Wright and Gonick (1947) in an extensive review of the literature on adjustment to physical handicap and illness found that as a group, physically handicapped persons were more frequently maladjusted than normal groups, that there was no evidence supporting a relationship between type of physical handicap and type of behavior maladjustment and that severely disabled persons appear to have more frequent and more severe maladjustment problems than those with milder disabilities. According to Barker (1948), a major problem for the physically handicapped is the unclear differentiation between physical normality and disability. Therefore, what a particular disabled person can or cannot do is uncertain, which results in the disabled person being left in a marginal status between physical normality and physical helplessness. Another problem relating to the marginal social position
in which a physically handicapped person often finds himself is the frequency with which he must cope with a new psychological situation. In such a situation a person does not know the sequence of activities necessary to achieve a particular end. Such lack of knowledge inevitably results in errors which may be very painful depending on how closely the new situation relates to the individual's central needs. It is difficult for an individual to maintain equilibrium in a constantly challenging environment.

Barker (1948) describes the physically disabled child as a person of unusual importance by virtue of requiring an unusual amount of help and attention. Such a set of circumstances would result in a much different social and physical environment for a handicapped child as opposed to a non-handicapped child within which to develop his self-concept. Barker (1948) also noted that physically handicapped children are often deprived of free play which he sees as serving an adjustive function in enabling the child to safely explore the real world and his emotions and ideas.

Mussen and Neuman (1958) indicate that physically handicapped children have a number of characteristic personality problems including, immaturity, conflict in interpersonal relationships and over concern with maintaining their existing ego structures rather than adjusting to new social situations. Their study indicates that good adjustment is dependent upon the development of a system of needs comparable with the individual's physical condition.

Haring (1959) found that the experiences cerebral palseid children have with their parents, siblings, peers and other important persons
in their lives are more important than the type of cerebral palsy they have.

Dibner (1973) sees the development of the self-concepts of children as the process of coming to terms with their own capacities in a continual process of self-evaluation. Dibner differentiates between ignoring a handicap and trying to make the best of oneself and openly recognizing a handicap and trying to make the best of oneself. To Dibner, ignoring the handicap is similar to trying to keep it a secret, as if something is wrong. Such an approach may perpetuate shame, prevent communication of feelings and thoughts between people, and prevent full acceptance of one's self. In his study of a semi-integrated camping situation for physically handicapped children. Dibner found that the severity of a disability appeared to diminish a person's chances for relating successfully to other group members by interfering with participation in activities that were important to the group. This factor is especially important when a severely handicapped child attempts to interact with non-handicapped children.

Cutsforth (1948) believes that it is theoretically possible for a physically disabled person to develop a healthy well, rounded personality. He acknowledges, however, that such an example is rarely encountered. Cutsforth maintains that in the physical impairment the handicapped person has a ready made tool for the manipulation of his social world. The attitudes of those surrounding the handicapped person are said to make it difficult for the handicapped person to
realistically appraise his handicap. He is given special status because of the handicap and he tends to try to maintain that special position. He then uses the handicap to manipulate his social world in such a way as to maintain his status. In summary, Cutsforth proposes that the actual physical condition has much less to do with the degree of disability and incapacitation observed, than has the impact of the handicapped person on society and its attitudes.

In a study of 30 pairs of mixed twins, one normal twin and one cerebral palsied twin, Shere (1954) found that parents tended to overprotect the cerebral palsied twin and to expect much of the non-handicapped twin. The non-cerebral palsied twins exhibited behavior patterns associated with a rejected child while the cerebral palsied child exhibited characteristics more like that of an accepted child.

In a study on birth defects, Fishman (1975) found that self-esteem and behavioral adjustment were positively correlated with a number of interrelated child and maternal behaviors including: the mother's positive reinforcement of the child's behavior, the mother's cognitive confrontation of the child's defect, and the mother's open communication with the child about the defect.

Haring (1959) and Mussen and Neuman (1958) provide suggestions for the healthy psychological development of the physically handicapped child. Haring encourages parents and teachers to think of the cerebral palsied child in terms of his own developmental growth pattern rather than comparing him to any norms. In other words, allow the child to do what he is capable of doing. It is just as unreasonable to expect
too little as too much.

Mussen and Newman (1958) assert that for effective work with physically handicapped children it is necessary to understand both the physical difficulties and the social and emotional problems the child is encountering. Their recommendations include:

1. Realistic attitudes toward disability should be fostered at home and at school.

2. The handicapped child should be encouraged to aspire to goals that are attainable.

3. The handicapped child should be rewarded for showing independence in thought and work.

4. The handicapped child should be taught to derive his social satisfactions from a relatively small number of close friendships rather than from extensive social contacts.

Mainstreaming the Physically Handicapped Child

What factors are relevant when the time comes to make a decision about the placement of a physically handicapped child in a mainstreamed setting? Why do we believe mainstreaming can have a positive effect? What attitudes and other factors will the mainstreamed child encounter from non-handicapped peers and teachers. What can we do to facilitate the positive integration of the handicapped child in a regular classroom? The literature gives us some insight.

Bronson (1966) found that children who do not experience sustained and successful encounters with age-mates are developmentally at risk in several respects. Nonsocial children have been found to manifest greater discomfort, anxiety, submissiveness, high variability in self-esteem and less willingness to engage in the environment than
more sociable children. As physically handicapped people have tended to be isolated socially throughout our history, mainstreaming may be viewed from one perspective as expanding the possibilities for the "sustained and successful" encounters Bronson considers of basic importance.

As early as 1948, Cain called for action by the public schools which were quite similar in intent as what we call mainstreaming today. He demanded:

1. That the schools must not deny education to any child who could gain from the school program.

2. That schools must insist upon an adequate understanding of the disabled child by its personnel.

3. That schools must adjust their programs in order that the disabled child feel success. This required that the child be accepted as he is and be placed in situations favorable to his learning and adjustment.

4. That the school must consider the part that the attitudes of others play in the adjustment of the disabled child and that parents be consulted in regard to placement of children in special classes.

5. That schools must consider their special programs as developmental as well as remedial.

6. That schools must not attempt to shift the total responsibility for the disabled child to the special teachers and clinical services provided.

Cain identified the ultimate integration of the child in his community as the aim to be accomplished and the means to that end in term of the child himself.

Haring (1957) recognized school as only one factor, but a very significant factor in the total development of the child. Further,
Haring asserts that the intellectual, social, and emotional adjustment of the handicapped child is affected by the attitudes and understanding the teachers have of him.

Barker (1948) hypothesizes that two factors begin to operate as the world of the handicapped child expands beyond the limits of the family. The degree of difficulty ordinary accomplishments pose for the child may be a disadvantage factor for the child. Routine tasks may require tremendous effort and intense emotional commitment. On the other hand, because he is disabled, less will be expected of him by society, possibly an advantageous factor. Barker also contents that society places social meanings on various physiques which may result in a handicapped person being placed in a prescribed social-psychological situation in addition to the personal significance of the disability to the individual. However, in Barker's view, the full force of cultural restraints and coercions associated with physique are not felt until adulthood.

Van Hentig (1948) describes disabilities as usually relative, seldom unconditional. The person is treated as an outsider and therefore comes to behave as an outsider. As rights are denied him the handicapped person retreats from the world of duties. He feels physical disability produces social distance, though he does offer hope that social distance can be reversed to a large extent.

Cain (1948) suggests that parents and teachers often fail to make an objective analysis of the handicapped child's abilities and aptitudes
and therefore often give guidance and help that is unrealistic. As a result, the disabled child is often placed in frustrating situations which increase his adjustment problems. Cain asserts that it is especially important to help the handicapped child gain insights into his disability and his personal and social relationships with others.

In general, research indicates that physically handicapped children are subject to prejudice but the results are somewhat mixed. In a study involving 230 non-handicapped from 2 to 6 years of age. Jones and Sisk (1967) found that 4 years was the age at which perceptions of the limitations imposed by physical handicaps first appeared with consistency.

The research of Goodman et. al. (1963) on variant reactions to physical disability suggests that children learn values about disabled children through socialization in the absence of first-hand experience.

Billings (1963) reports that the attitudes of non-handicapped children toward physically handicapped children were found to be significantly more unfavorable than their attitudes toward non-handicapped children.

In a sociometric study on seventh and eighth graders Soldwedel found physical disability did not affect the direction in which physically handicapped and non-handicapped children choose and are chosen.

Richardson et. al. (1961) found greater preference for the child whose disability is more distant from his face. Children with physical handicaps ranked pictures of children with varying handicaps including one picture of a non-handicapped child, in the same order.
as normal children did, an example of a minority culture assimilating the values of the majority culture.

Rapier et. al. (1972) found that non-handicapped children developed a more positive attitude toward the orthopedically handicapped as a result of an integrated school experience.

In a study on the social status of physically handicapped children Force (1956) drew the following conclusions:

1. Physically handicapped children are not as well accepted as normal children in integrated classes at the elementary school level.

2. Psychological integration of physically handicapped children among normal children cannot be achieved by mere physical presence in a mixed group.

3. Psychological identification of subgroups of normal children and physically handicapped children is made by elementary school children in their choice behavior.

4. Physical disability magnifies the difficulties of a child in achieving social acceptance from normal peers.

5. Physical disabilities have varying social values with cerebral palsy ranking lowest on a value scale.

6. Few physically impaired children have enough positive assets to offset completely the negative effect of being labeled as handicapped by normal peers.

7. The individual physically handicapped child who is highly accepted by a peer group manifests many socially desirable traits and relatively few negative traits of behavior patterns.

8. Among the elements to be considered in integration is the number of physically handicapped children which a class can absorb without defeating the
purpose of integration. Too many handicapped children in a class may result in a minority-majority subgroup identification of individuals based on physique.

9. The problem of a status and acceptance for the physically handicapped is one that exists for those who are as young as 6 years.

10. The problems of integrating physically handicapped children are closely allied to the whole field of dealing with prejudice.

Dibner (1973) found that those physically handicapped children who had good relationships within their own group also related well to normal children and those who related poorly to their own group did not make friends with the non-handicapped. Dibner suggested a number of ways to promote interactions between physically handicapped and non-handicapped children. He also stresses the role of the teacher or counselor, in a camp situation, as being a facilitator in interactions between handicapped and non-handicapped children by helping both groups to understand the behaviors and feelings of the other. With regard to the severely handicapped, Dibner suggests that a semi-integrated setting can be beneficial in many ways. In such a setting the handicapped child would be included in a number of groups, of varying severities of handicaps to no handicap. In such a setting the handicapped child could feel normal within his special group and still experience the challenging effect of a true mainstreaming situation.

In conclusion, Force (1956) suggests that efforts at psychological integration must extend beyond the school building to include parents
and community. Because children's attitudes are often a reflection of adult attitudes. Force also emphasizes the importance of interpreting handicapped children to their own parents and to parents of normal children.

Barker (1948) considers the problem of psychological adjustment in the handicapped person as one of reducing the minority status, the marginality, and the continual psychological newness confronted by the handicapped in the world beyond the family.
CHAPTER III
RESEARCH DESIGN AND METHOD

Chapter III includes descriptions of research and methods including: subjects, settings, instruments, data collection procedures, statistical hypotheses, and statistical procedures.

Design and Method

This study is descriptive in nature and includes an analysis of the scores obtained from administration of the "I Feel-Me Feel" Non-Verbal Self-Concept Inventory (Yeatts & Bentley, 1968) to three groups of children; (1) physically handicapped young children in mainstreamed educational situations, (2) physically handicapped young children in segregated settings, and (3) non-handicapped children in the same age range as the physically handicapped children. The primary caregivers of the three groups of children were also asked to respond to the inventory as they thought their children would. A schematic design of the study is shown in Figure 2.

Subjects and Settings

Included in this study were 48 children and 48 adults, 24 boys and 24 girls and their primary caregivers (all females). The subjects ranged in age from 3 years to 7 years. Twelve subjects, six male and six female, were physically handicapped children enrolled in special education programs only. Twelve subjects, six male and six female, were physically handicapped children enrolled in
*Because the mainstreamed physically handicapped children averaged approximately 1 year older in age than the segregated physically handicapped children, when the non-handicapped children were matched by age to the handicapped children, a younger group (segregated match) and an older group (mainstreamed match) also resulted in the non-handicapped children.

Figure 2 — Research Design
mainstreaming situations in addition to their special education programs. At present there are very few physically handicapped children enrolled in mainstreamed situations. The mainstreamed sample of children were selected from the population of physically handicapped children, certified following the Michigan Certification Code as physically or otherwise health-impaired (POHI), who had been involved in a mainstreamed situation in addition to their special education intervention programs for at least seven months at the time they completed the "I Feel-Me Feel" Self-Concept Inventory. This population was identified through records of existing special education (only) intervention programs. The sample of special education (only children was then matched to the special education plus mainstreamed sample by degree of handicap and school district. The 24 physically handicapped subjects were matched with 24 non-handicapped subjects by age, sex, and school district.

The handicapped subjects were all of minimal to moderate degree of handicap. As it was not possible to match exact physical handicaps between the mainstreamed and segregated groups of subjects, care was taken to include only those segregated handicapped subjects who were, by teacher judgement, mainstreamable. This is to say, that although not presently mainstreamed, these segregated handicapped subjects were not so severely impaired as to preclude their also moving into a mainstreamed educational setting. A socio-economic level match was loosely achieved by drawing the mainstreamed and segregated physically handicapped subjects and the non-handicapped
subjects from school districts of comparable general socio-economic levels. The sample represented neither high nor low level socio-economic class extremes.

Due to the small population of subjects available who fit into the categories determined by the study, the handicapped subjects could not be matched as closely by age as was expected. Mean age for the mainstreamed handicapped subjects was 5.89 years. Mean age for the segregated handicapped subjects was 4.89 years. Because of the age difference between the two groups of handicapped subjects the non-handicapped subjects were matched in two groups. The 12 subjects who were matched to the mainstreamed handicapped subjects had a mean age of 5.88 closely approximating the mean age of 5.89 of the mainstreamed subjects. The 12 subjects who were matched to the segregated subjects had a mean age of 4.94, closely approximating the mean age of the segregated subjects which was 4.89.

The subjects were all selected from the Metropolitan Detroit Area. The handicapped subjects (and their primary caregivers) were identified through existing special service agencies and were currently enrolled in a special education intervention program. The control subjects (non-handicapped) were identified through the public school system correlating with the school districts of the handicapped subjects and matched by age and sex. The data was collected in the home or school setting as was appropriate and convenient for both normal and handicapped subjects and their primary caregivers. Settings included Sparkey Preschool Project, Wayne-Westland School District; Gibbings Elementary
School, George Washington Elementary School, Red Caboose Nursery School, Macomb Intermediate School District; Irving Diagnostic and Learning Center, Herrington Elementary School, Lowry Early Childhood Center and Pine Nob Elementary School, Oakland Intermediate School District. In this study the primary caregivers were, without exception, the mothers of the children.

**Description of Instrument**

One instrument was used in this study, the "I Feel-Me Feel" Non-Verbal Self-Concept Inventory. Further, only 19 of the 40 items of the original "I Feel-Me Feel" inventory were used. These 19 items "maintained significant item loadings on a self/social construct" factor in two previous studies with 5 year old children (White & Human, 1976).

The "I Feel-Me Feel" instrument is a 40 item inventory designed to measure five dimensions of self-concepts: General Adequacy, Peer, Teacher-School, Academic, and Physical. Each item is a black and white picture of an event related to a young child's life experiences. Three faces, graphically representing sadness to happiness, are painted below each picture. The respondent is asked to indicate which picture shows how he/she feels about the picture. To arrive at a self-concept score each sad face choice was scored one point, each middle face - three points, each happy face - five points. The self-concept score was the mean score of the 19 items.

Based on a sample of 4,000 children, test, retest reliability coefficients of the "I Feel-Me Feel" Inventory were .82 for kindergarten children, .81 for first grade, .78 for second grade and .79
for third grade (Yeatts, 1967). Furthermore, Yeatts found correlations of .68 between scores on the inventory and scores on the Metropolitan Readiness Test, and correlations of .73, .79, and .73 between scores on the inventory and scores on the California Achievement Test for first, second, and third graders respectively.

Responses on the "I Feel-Me Feel" test were factors analyzed (in the White & Simmons study) by the principal components solution (BMD: Dixon, 1970). Ten components which had eigenvalues greater than one were rotated to the varimax criterion. The first factor contributed 33% of the total variance. Each of the nine other factors contributed less than 4% to the total variance. . . . .

The "I Feel-Me Feel" test was reported to be a multi-factor type instrument (Yeatts & Bentley, 1968), but in this sample (White & Simmons) only one factor, loading on nineteen items, accounts for a significant amount of the variance (33%). . . . . This one factor of "general adequacy" was the only factor considered in the White and Simmons analysis.

**Data Collection Procedures**

1. **Normal children.** Each child was taken to a quiet room in his school where he was alone with the examiner. The examiner read the captions which described each item to the child, instructed the child to look at the picture, and instructed the child to put his finger on the one of the three faces that best described how the picture made him feel. The examiner recorded the choice on an answer sheet which was coded to identify the child with his primary caregiver.
2. **Special education (only) physically handicapped children.**

Same procedure as for normal children unless the child did not have use of at least one hand. In this case the examiner instructed the child to indicate which face best described how the picture makes him feel by a predetermined, easily distinguishable signal when the examiner pointed to the face that best described how the picture made him feel. The examiner always pointed to each of the three faces moving from left to right, continuing through the third face even if the child indicated a choice. The child's signal was agreed upon and then practiced on three pictures from the inventory which were not being used in this study. The experimenter recorded the choice on an answer sheet which was coded identifying the child with his/her primary caregiver.

3. **Special education plus mainstreamed handicapped children.**

Followed the same procedure as with special education, (only) physically handicapped children.

4. **Primary caregivers of normal children.** The primary caregiver was visited at the child's home only if arrangements could not be made for the primary caregiver to meet with the examiner at the child's school or to complete the inventory by phone. If at home or at school, the caregiver was taken to a quiet room where she was alone with the examiner. The caregiver was instructed to complete the inventory she thought her child would by marking the position on the "I Feel-Me Feel" Inventory answer sheet with a circle that corresponded to the position of the face that best described how the caregiver thought the picture
would make her child feel. If the inventory was done by phone the statements under the pictures were read to the caregiver and the caregiver was instructed to respond with the words "good", "bad", or "I don't know" with respect to how the caregiver believed her child would respond to the item. The answer sheet was coded to relate the primary caregiver to her child.

5. **Primary caregivers of special education (only) physically handicapped children.** Same procedure as for primary caregiver of normal children.

6. **Primary caregivers special education plus mainstreamed physically handicapped children.** Follow same procedure as for primary caregivers for normal children.

The experimenter was assisted in the collection of the data by a graduate student who had participated in many similar research projects. Both the experimenter and the graduate student standaredized the procedure for administering the inventory on a group of children of ages similar to those of the subjects included in the study.

**Statistical Hypotheses**

1. There is no significant difference between the self-concept scores of physically handicapped and non-handicapped (normal) children.

2. There is no significant difference between the self-concept percept responses given by the primary caregivers of physically handicapped children and the self-concept percept responses given by the primary caregivers non-handicapped (normal) children.

3. There is no significant difference between the self-concept scores of physically handicapped children who have experienced a mainstreamed situation in addition to their special education intervention programs and physically handicapped children who have experienced no
mainstreamed situation in addition to their special education intervention programs.

4. There is not significant difference between the self-concept percept responses given by the primary caregivers of physically handicapped children who have experienced a mainstreamed situation in addition to their special education intervention programs and the self-concept percept responses given by the primary caregivers of physically handicapped children who have experienced no mainstreamed situation in addition to their special education intervention programs.

Statistical Procedures

Hypothesis 1: There is no significant difference between the self-concept scores of physically handicapped and non-handicapped (normal) children.

Procedure 1: $H_0: \bar{x}_1 = \bar{x}_2$ \hspace{1cm} $\alpha = .05$

F-test of sample variances should be performed before t-test on means.

$H_0: s_1^2 = s_2^2 \hspace{1cm} H_1: s_1^2 \neq s_2^2 \hspace{1cm} \alpha = .05$

If $H_0$ is not rejected: Use SPSS 17.2.1.3 Comparison of Means - Independent Samples, Populations with Common Variance.

If $H_0$ is rejected: Use SPSS 17.2.1.4 Comparison of Means - Independent Samples, Populations with Unequal Variances.

Hypothesis 2: There is no significant difference between the self-concept percept scores given by the primary caregivers of physically handicapped children and the self-concept percept scores given by the primary caregivers non-handicapped (normal) children.

Procedure 2: $H_0: \bar{x}_1 = \bar{x}_2$ \hspace{1cm} $\alpha = .05$

F-test of sample variances should be performed before t-test on means.
Hypothesis 3: There is no significant difference between the self-concept scores of physically handicapped children who have experienced a mainstreamed situation in addition to their special education intervention programs and physically handicapped children who have experienced no mainstreamed situation in addition to their special education intervention programs.

Procedure 3: \( H_0: \bar{x}_1 = \bar{x}_2 \quad \alpha = .05 \)

F-test of sample variances should be performed before t-test on means.

\[ H_0: s_1^2 = s_2^2 \quad H_1: s_1^2 \neq s_2^2 \quad \alpha = .05 \]

If \( H_0 \) is not rejected: Use SPSS 17.2.1.3 Comparison of Means - Independent Samples, Populations with Common Variance.

If \( H_0 \) is rejected: Use SPSS 17.2.1.4 Comparison of Means - Independent Samples, Populations with Unequal Variances.

Hypothesis 4: There is no significant difference between the self-concept percept scores given by the primary caregivers of physically handicapped children who have experienced a mainstreamed situation in addition to their special education intervention programs and the self-concept percept scores given by the primary caregivers of physically handicapped children who have experienced no mainstreamed situation in addition to their special education intervention programs.
Procedure 4: \( H_0: \bar{x}_1 = \bar{x}_2 \quad \alpha = .05 \)

F-test of sample variances should be performed before t-test on means.

\( H_0: s_1^2 = s_2^2 \quad H_1: s_1^2 \neq s_2^2 \quad \alpha = .05 \)

If \( H_0 \) is not rejected: Use SPSS 17.2.1.3 Comparison of Means - Independent Samples, Populations with Common Variances.

If \( H_0 \) is rejected: Use SPSS 17.2.1.4 Comparison of Means - Independent Samples, Populations with Unequal Variances.
<table>
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<tr>
<th>SELF-CONCEPT</th>
<th>SELF-CONCEPT</th>
<th>SELF-CONCEPT</th>
<th>SELF-CONCEPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORMAL</td>
<td>SPECIAL EDUCATION AND MAINSTREAMING</td>
<td>SPECIAL EDUCATION (ONLY)</td>
<td></td>
</tr>
<tr>
<td>12s's (ms)</td>
<td>12s's (seg)</td>
<td>12s's (ms)</td>
<td>12s's (seg)</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**Figure 3 -- Research Design and Statistical Hypotheses**

**Statistical Hypotheses by Cells**

1. $1 + 2$ versus $5 + 7$
2. $3 + 4$ versus $6 + 8$
3. $5$ versus $7$
4. $6$ versus $8$
CHAPTER IV
ANALYSIS OF THE DATA

The results for each of the hypotheses are discussed with complete data displayed in the tables. Note that mean self-concept scores in this study all indicated varying degrees of positive self-concepts and self-concept percepts across all groups. As a group, even the non-mainstreamed children, who had the lowest mean score, 3.868, still reported positive feelings about themselves in the majority of the situations depicted in the inventory. Therefore, any differences noted refer to degree of positive self-concept as indicated by the inventory rather than the inference of negative self feelings in any group.

**Hypotheses**

**Hypothesis One**

There is no significant difference between the self-concept scores of physically handicapped and non-handicapped children.

Although the mean self-concept score of the physically handicapped children was lower than the mean score of the non-handicapped children, 4.04 versus 4.20 respectively, the difference was not statistically significant. The variability of scores of the handicapped children was also greater than the variability of the scores of the non-handicapped children, SD = 0.913 versus SD = 0.620 respectively.
Hypothesis Two

There is no significant difference between the self-concept percept responses given by the primary caregivers of the physically handicapped children and the self-concept percept responses given by the primary caregivers of the non-handicapped children.

Although the mean self-concept percept score of the primary caregivers of the physically handicapped children was lower than the mean self-concept percept score of the primary caregivers of the non-handicapped children, 4.56 versus 4.68 respectively, the difference was not statistically significant. The variability of the percept scores of the primary caregivers of both groups were equal, SD = 0.25.

Hypothesis Three

There is no significant difference between the self-concept scores of physically handicapped children who have experienced a mainstreamed situation in addition to their special education intervention programs and physically handicapped children who have experienced no mainstreamed situation in addition to their special education intervention programs.

Although the mean self-concept score of the non-mainstreamed children was lower than that of the mainstreamed children, 3.97 versus 4.21 respectively, the difference was not statistically significant. There was however much greater within group variation in the scores of the non-mainstreamed children than the scores of the mainstreamed children, SD = 1.095 versus SD = 0.691 respectively. This within group variation contributed to the non-significant results in the analysis.
Hypothesis Four

There is no significant difference between the self-concept percept responses given by the primary caregivers of physically handicapped children who have experienced a mainstreamed situation in addition to their special education intervention programs and the self-concept percept responses given by the primary caregivers of physically handicapped children who have experienced no mainstreamed situation in addition to their special education intervention programs.

There was a statistically significant difference in the percept of the child's self-concept between mean scores of primary caregivers of mainstreamed physically handicapped children and the primary caregivers of non-mainstreamed children. The mean percept of self-concept score of primary caregivers of mainstreamed handicapped children was 4.46 versus a mean score of 4.67 for primary caregivers of non-mainstreamed handicapped children which resulted in a t-value of 2.26. A t-value of 2.26 with 22 degrees of freedom is statistically significant at the .03 level. The within group variation was similar for the two groups with a standard deviation of .218 for the mainstreamed group and a standard deviation of .237 for the non-mainstreamed group. In testing for homogeneity of variance, the F-test of sample variances was not statistically significant, therefore SPSS 17.2.1.3 Comparison of Means, Independent Samples, Populations with Common Variances was used as the test of significance.

Further Analysis of Data

Due to difficulties in the identification of physically handicapped children who had been mainstreamed for an adequate length
of time at such a young age and non-mainstreamed physically handicapped children of similar degree of disability who had not been mainstreamed it was impossible to match mainstreamed and non-mainstreamed handicapped children by age as closely as was desired. The mean age for mainstreamed handicapped children was 5.89 years and the mean age for non-mainstreamed handicapped children was 4.89 years.

In order to test for possible confounding effects of age on the self-concept score, the 24 non-handicapped subjects were matched in two groups, 12 subjects to match the ages of subjects in the older mainstreamed group of handicapped subjects, and 12 children to match the ages of the younger segregated group of handicapped subjects.

The mean age of non-handicapped children matched with the mainstreamed children was 5.88 years, closely approximating the mean age of the mainstreamed group which was 5.89 years. The mean age of the non-handicapped children matched with the non-mainstreamed children was 4.94 years, also closely approximating the mean age of the non-mainstreamed handicapped children which was 4.89 years. Analysis of the self-concept scores of the two groups of non-handicapped children representing the different age groups showed no statistically significant difference in mean self-concept score due to age.

Among all four groups of children only the non-mainstreamed physically handicapped children's mean self-concept scores were markedly different from the scores of the other children in a negative direction. The mean self-concept scores of the other three groups of children were
very similar in mean score and variance. The highest mean score among the three was that of the mainstreamed control group at 4.2717 with a standard deviation of 0.653. The mid mean score was that of the mainstreamed physically impaired children at 4.2142 with a standard deviation of 0.691. The non-mainstreamed control group had the lowest mean score at 4.1317 with a standard deviation of 0.605. In contrast, the mean score of the non-mainstreamed physically handicapped children was 3.87 with a standard deviation of 1.095.

Mean scores of primary caregiver's perceptions of child's self-concept were higher than the corresponding children's mean self-concept scores across all groups and also demonstrated much less within group variance. There was very little difference in the standard deviations across the four groups of primary caregiver percept scores. Primary caregivers of the mainstreamed handicapped group had the lowest standard deviation at 0.218. Primary caregivers of the mainstreamed control group had the highest standard deviation at 0.264. Relatively speaking, primary caregivers of the segregated control group reported the highest mean score at 4.7275. Primary caregivers of the mainstreamed handicapped group reported the lowest mean score at 4.4558. Overall, the mean primary caregiver percept scores were uniformly high and the standard deviations were uniformly low. Clearly, the primary caregivers across all groups tended to perceive their children's self-concepts as very positive irregardless of handicap or school situation.
<table>
<thead>
<tr>
<th>GROUP</th>
<th>N</th>
<th>MEAN</th>
<th>STANDARD DEVIATION</th>
<th>STANDARD ERROR</th>
</tr>
</thead>
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<tr>
<td>Mainstreamed</td>
<td>12</td>
<td>4.2142</td>
<td>0.691</td>
<td>0.200</td>
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<td>Mainstreamed Control</td>
<td>12</td>
<td>4.2717</td>
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<td>0.189</td>
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<tr>
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<td>4.1317</td>
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<td>0.175</td>
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<tr>
<td>All Handicapped</td>
<td>24</td>
<td>4.0412</td>
<td>0.913</td>
<td>0.186</td>
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<tr>
<td>All Control</td>
<td>24</td>
<td>4.2021</td>
<td>0.620</td>
<td>0.127</td>
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TABLE 3
Primary Caregiver's Perception of Child's Self-Concept Mean Scores

<table>
<thead>
<tr>
<th>GROUP</th>
<th>N</th>
<th>MEAN</th>
<th>STANDARD DEVIATION</th>
<th>STANDARD ERROR</th>
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</thead>
<tbody>
<tr>
<td>Mainstreamed</td>
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<td>4.458</td>
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<tr>
<td>Mainstreamed Control</td>
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<td>4.629</td>
<td>0.264</td>
<td>0.076</td>
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<tr>
<td>Non-Mainstreamed</td>
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<td>4.666</td>
<td>0.237</td>
<td>0.068</td>
</tr>
<tr>
<td>Non-Mainstreamed Control</td>
<td>12</td>
<td>4.728</td>
<td>0.230</td>
<td>0.066</td>
</tr>
<tr>
<td>All Handicapped</td>
<td>24</td>
<td>4.561</td>
<td>0.247</td>
<td>0.050</td>
</tr>
<tr>
<td>All Control</td>
<td>24</td>
<td>4.678</td>
<td>0.247</td>
<td>0.050</td>
</tr>
</tbody>
</table>
Figure 4 -- Mean Scores by Group
Mean scores of primary caregiver's perceptions of child's self-concept were higher than the corresponding children's mean self-concept scores across all groups and also demonstrated much less within group variance. Primary caregivers of the mainstreamed handicapped group had the lowest standard deviation at 0.218. Primary caregivers of the mainstreamed control group had the highest standard deviation at 0.264, a very narrow range. Primary caregivers of the non-mainstreamed control group reported the highest mean score at 4.7275. Primary caregivers of the mainstreamed handicapped group reported the lowest mean score at 4.4558. Further, the greatest difference between mean scores of primary caregiver percept and children's mean self-concept scores was the non-mainstreamed handicapped group at .81. Second was the non-mainstreamed control group at .60. The differences between means score of primary caregivers and mean score of children were very similar for the mainstreamed group and mainstreamed control at .24 and .36 respectively.

In general then, the mean percept score of primary caregivers of handicapped children was slightly lower than the mean percept score of the primary caregivers of non-handicapped children, 4.56 versus 4.68. The mean self-concept scores of the handicapped children as a group was also lower than that of the non-handicapped children, 4.04, versus 4.20.
The conclusions and generalizations of the study are discussed in this section and recommendations are given for further research. In interpreting the results of this study the same caution should be exercised as would be used in the interpretation of data resulting from any instrument developed for the measurement of self concept. As Coller notes in his paper on the assessment of self concept in early childhood education, self concept instruments differ widely in format and testing goals and objectives. Validity is impossible to assess as each instrument is designed to measure its own definition of self concept. (Coller, 1971) Further, as self concept has been argued by many to be a multi-dimensional construct, any or all of the fifty some self concept instruments examined by Coller could be measuring one or more factors relating to a composite self concept. With respect to content validity in particular, not one of the more than fifty instruments examined by Coller contained contents selected through sampling procedures from the range of early childhood experiences. The instrument used in this study, while not among those reviewed by Coller is no different. The original "I Feel - Me Feel" Self Concept Inventory was a forty item instrument designed to measure five dimensions of self concepts.
Responses to the "I Feel - Me Feel" inventory were then factor analyzed by the principal components solution. Nineteen items made up the first factor which contributed 33% to the total variance. Because of the extremely short attention span of very young children these nineteen items, a general adequacy factor, were used in this study. Nineteen items or even forty items, are not sufficient to make a claim for content validity. However, the study of self-concept may be an area of inquiry similar to that of intelligence, where it is extremely difficult if not impossible to establish content validity for any instrument.

Criterion related validity may provide more defensible data. If the basic interest is to predict some future behavior or level of achievement as opposed to being ultimately interested in what is being assessed, self-concept measures may have more value. Self-concept measures have repeatedly been linked to school achievement. (Purkey, 1970) Yeatts found correlations of .68 between scores on the "I Feel - Me Feel" Inventory and the Metropolitan Readiness Test and correlations between .73 and .79 for first through third graders between the inventory and the California Achievement Test. (Yeatts, 1968) Because of the content validity problem, in the discussion of the results of this study, the scores reported should not be interpreted as absolute measures of the self concept construct. Rather the scores should be intrepreted as providing information with respect to the relative strengths of positive self-social or general adequacy
feelings of the subjects included in this study.

It should also be noted when comparing primary caregiver percept scores to child self-concept scores that the primary caregiver responses were collected by telephone interviews. Each child responded to the caption of each of the 19 items while looking at a drawing depicting the situation described by the caption. The primary caregivers responded only to the caption as read by the interviewer over the telephone. Therefore, caution should be exercised in the interpretation of comparisons between primary caregiver's scores and child self-concepts scores. Care was taken however to read each caption in exactly the same manner to the primary caregivers and the children. The same responses choices were also provided to both primary caregivers and children with the exception that the children could also point to one of the three faces depicting the response choices.

Conclusions and Generalizations

It is of interest to note that the overall mean self-concept scores of the handicapped children were very similar though slightly lower than the non-handicapped children's scores. One might have expected due to literature documented tendency of parents to over-protect their handicapped children and the normally lower level of social experience and physical competence, that the self-concept scores of the handicapped children would be much lower. A possible explanation for this deviation from expected results may be somewhat explained by the young child's egocentricity or inability to see
himself from another's point of view. It is possible that 4 and 5 year old handicapped children are not yet aware of their physical individualities or the real limitations their handicaps may impose in later endeavors. They may be more aware of their range of abilities in terms of their own private and immediate goals and interests than as compared with the abilities of non-handicapped people. It is also possible that if parental over-protection does exist, it may, in the early years, operate as a positive factor to the child in making him very much the center of the parent's attention, indeed a very important person upon whom much attention is lavished.

This early attention, while possibly enhancing the young child's early feeling of self worth and security, may if continued into middle childhood, operate as a negative factor. In early childhood the child's egocentricity protects and encourages the growth and development of basic skills and knowledge of his physical environment. A protective, supportive environment protects the child from physical danger and allows him to freely develop his theories about the objects and situations he encounters in his world. As the child's development progresses into the fifth and sixth year social interaction becomes an important factor in breaking down the protective shield egocentricity provides, thus allowing the child to begin to understand that his definition of the world is not the only definition. This process is essential to the development of logical thought and effective social
relations. Continued over-protection of the child could inhibit the child in breaking through his early egocentricity and result in less optimal cognitive and social development. It is important in any child's development that his parents or primary caregivers accurately perceive the child's abilities, interests and feelings. It is especially critical, however, in the handicapped child's development. The child needs to be allowed to venture out into the world to test his ideas and skills against those of his peers, but in the process, he must also become aware of his individuality and his limitations. This may be a very painful process for the handicapped child and for his primary caregiver or parent. Throughout the literature we see the importance of realistic expectations stressed as a major factor in positive adjustment in the handicapped. Realistic parental expectations and sensitivity to the handicapped child's feelings may be especially important factors in the handicapped child attaining his potential and developing positively in all areas of development.

In observing that the self-concept scores of the segregated children were lower than the mainstreamed children's scores, it is also of interest to note that the primary caregiver's percept scores of the segregated children were the second highest of the percept scores. The largest discrepancy between child self concept scores and primary caregiver percept scores occurred here. It would be of interest to investigate further the hypothesis that these primary caregivers may not have yet had to come to terms with "real world"
expectations for their children and the possible negative reactions their children may encounter. These children may, in their primary caregiver's eyes, go from the protected environment of the home to the protected environment of the segregated classroom. The children's place in the world may still be idealized by parents, primary caregivers, who themselves have not yet had to face the reality of the limitations imposed by their child's handicap.

The smallest discrepancy between primary caregiver's percept and child's self-concept score was that of the mainstreamed group. Along the same line of reasoning, perhaps these primary caregivers, in sending their children off into the less protected world of the regular classrooms, have had to deal much earlier with the significance of their children's individuality and its possible social and psychological consequences. These primary caregivers may be more in touch with their children's true feelings and relative strengths and weaknesses. It is possible that the mainstreaming experience has a psychological impact on the primary caregiver earlier than it has on the still egocentric young child. If this is true, then special attention should be given to preparation of the primary caregivers, or parents, of the soon to be mainstreamed child. This special attention should be continued through the adjustment phase of the mainstreaming experience. With respect to the results of this study, mainstreaming does appear to have an effect, if only on the primary caregiver's percept - child's self-concept
discrepancy. It can only be speculated as to what differential effects a sensitivity program for primary caregivers of pre-mainstreamed children would have on the primary caregiver-child relationship and the child's ultimate adjustment as he grows less egocentric and more aware of the consequences of the physical limitations with which he must live. The significant difference between primary caregiver's percept of the self-concept of mainstreamed children versus primary caregiver's percept of self-concept of segregated children provides further support of the hypothesis that the primary caregiver may be more affected than the young child by the mainstreaming experience in its early stages.

It is impossible to know which factors are causal and which are reactive, but the data gives reason to believe that the mainstreaming experience may be related in some way to primary caregiver perception of child's self-concept. As the primary caregiver percept of child's self-concept is not only lowest in the mainstreamed group but also closest in estimation to child reported self-concept score it is not unreasonable to hypothesize that the mainstreaming experience is somehow affecting the child's self-concept and primary caregiver percept relationship. Though the self-concept scores of the mainstreamed children were higher than the self-concept scores of the segregated children, the difference was not statistically significant. Perhaps the effects of mainstreaming on primary
caregiver perception of child's self-concept is more systematic and predictable than the mainstreaming effects on the young child's self-concept. If this is true then a drop in primary caregiver percept of child's self-concept might be investigated as a leading indicator of the beginning of the recognition of the reality and permanence of the child's handicap by the parent or primary caregiver. It would then be necessary to monitor any changes which occur in child self concept.

Another area of interest is the much narrower variation of primary caregiver's percept scores than children's self-concept scores across all groups. Standard deviations among the children's scores by group were two to four times greater than standard deviations among the primary caregiver's percept scores by group. Perhaps primary caregivers in general have much more standard expectations about how children feel about everyday events in their lives than the children in this age range do. The source of greatest variation in scores among the children's groups was in the segregated handicapped group. The segregated control group of children, who represented the same age range as the segregated handicapped children, demonstrated within group variation very similar in degree to the older mainstreamed and mainstreamed control groups. Thus there appears to be greater variation in the self-concept of the segregated handicapped children. This variation or instability indicates a need for further study
which might isolate factors related to the variability of the self-concept scores of segregated subjects and the possible relationship of the variability to the high primary caregiver percept scores.

Recommendations for Further Study

The discussion of conclusions and generalization has pointed out a number of possible questions for further study. The instrument did appear to provide consistent results. However, it would be of interest to replicate the study with a much larger sample to see if similar results are obtained.

It would be of interest to investigate varying types of intervention programs aimed at preparing the primary caregivers or parents for the mainstreaming of their children. Such a study might provide information in regard to the reaction of the parents to the mainstreaming process and the subsequent effects of those reactions on their children's adjustments in the mainstreamed setting. This type of study should also highlight changes in parent-child relationships.

A longitudinal study following handicapped children and their primary caregivers through the early childhood age range, 3 to 7 years of age, and its accompanying progression of segregated and mainstreamed settings would provide information on the progressive effects of mainstreaming on the self-concepts of young children and the self-concept percepts of their caregivers. Such a study might also provide information on the effects of initiating mainstreaming at various ages, and in addition might magnify the differences found in self-concept
scores of mainstreamed versus segregated children which did not reach significance in this study. If data were also collected in mainstreamed and non-mainstreamed settings on the non-handicapped children's perceptions of their handicapped peers and their own feelings about the mainstreaming experience, valuable information could be gained relating to the process of acceptance of non-acceptance of the handicapped by their non-handicapped peers. As concerned as we may be about the feelings of the handicapped, the ultimate goal of mainstreaming is acceptance of the handicapped into the dominate social system.

The "I Feel-Me Feel" Non-Verbal Self-Concept Inventory was found to be very appropriate for use with young physically impaired children. The children had little trouble understanding how to respond. The 19 item length appeared to match the attention span of the children very well. As Coller mentioned in his discussion of various self-concept assessment techniques, most self-concept tests vary in their testing goals or objectives therefore it is difficult to compare results of various instruments. Coller did note however that low significant correlations were obtained when self report measures were compared to direct observational procedures. Because this inventory appears to be so well suited for use with young physically handicapped children, it would be of great interest to design an observational procedure relating directly to the goals and
objectives of the "I Feel-Me Feel" Non-Verbal Self-Concept Inventory. Such a companion instrument would provide a link between self reported feelings and observed behavior. Such an instrument might also be useful in intervention programs to aid primary caregivers and teachers of young handicapped children observe and interpret the children's behaviors more meaningfully.
Purpose of Study

To examine the relationship between the self-concept of the physically handicapped child and the experience of being mainstreamed.

Subjects

Physically handicapped children of mild to moderate impairment (not mentally impaired) between the ages of 3 and 7 years and their primary caregiver (usually mother). Subjects will be divided into two groups: those who have been mainstreamed for at least one semester, preferably, one academic year, and those who have never been mainstreamed. The two groups will be matched as closely as possible by degree of handicap, age, and sex. If numbers permit, matched pairs will be randomly selected.

Description of Instrument

The "I Feel-Me Feel" Non-Verbal Self-Concept Inventory, which is made up of 19 items. Each item is a black and white picture of an event related to a young child's life experiences. Three faces graphically representing sadness to happiness are painted below each picture. The child is asked which face shows how he feels about the picture. The primary caregiver, in a separate session, is asked to indicate how she/he believes the child would respond.

I agree to participate and give permission for my child to participate in the above described study with the understanding that my confidentiality will be maintained and that I may withdraw at any time with no further obligation or liability on my part.

Signature

Phone
"I FEEL-ME FEEL"  
SELF-CONCEPT INVENTORY

NAME: ________________________________________
SCHOOL: ______________________________________
MAINSTREAM SCHOOL: ____________________________

Child's Response Sheet

<table>
<thead>
<tr>
<th>Practice</th>
<th>Left</th>
<th>Middle</th>
<th>Right</th>
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</thead>
<tbody>
<tr>
<td>A Practice</td>
<td>Left</td>
<td>Middle</td>
<td>Right</td>
</tr>
<tr>
<td>B Practice</td>
<td>Left</td>
<td>Middle</td>
<td>Right</td>
</tr>
<tr>
<td>C Practice</td>
<td>Left</td>
<td>Middle</td>
<td>Right</td>
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<td>1.</td>
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<td>19.</td>
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<td>Middle</td>
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</tbody>
</table>
"I FEEL-ME FEEL"
SELF-CONCEPT INVENTORY

PARENT'S NAME: ____________________  CHILD'S NAME: ________________

CHILD'S SCHOOL: ________________________________

HANDICAP: ________________ Minimal ________________ Moderate

SEX: _______  AGE: _______  YEARS: _______  MONTHS: _______

MAINSTREAMED: _______ No _______ Yes _______ # of Months

Parent's Response Sheet

Circle word describing position of the face representing how you think your child would feel in the situation described by the picture.

A Practice: Left  Middle  Right

B Practice: Left  Middle  Right

C Practice: Left  Middle  Right

1. Left  Middle  Right

2. Left  Middle  Right

3. Left  Middle  Right

4. Left  Middle  Right

5. Left  Middle  Right

6. Left  Middle  Right

7. Left  Middle  Right

8. Left  Middle  Right

9. Left  Middle  Right

10. Left  Middle  Right

11. Left  Middle  Right

12. Left  Middle  Right

13. Left  Middle  Right

14. Left  Middle  Right

15. Left  Middle  Right

16. Left  Middle  Right

17. Left  Middle  Right

18. Left  Middle  Right

19. Left  Middle  Right
DEFINITIONS

Least Restrictive Environment

A range of educational settings which maximizes the handicapped child's contacts with non-handicapped children as appropriate to match the needs and abilities of the individual handicapped child.

Mainstreaming

Placement of handicapped children into programs with non-handicapped children.

Objective Public Identity

Consists of the whole gestalt of public impressions accruing to his acts. Largely situationally defined.

Primary Caregiver

The person, usually the mother, who has primary responsibility for the child in day to day care and nurturing.

Private Identity

Self concept.

Reflected or Looking-Glass Self

Man perceives and defines himself as he believes others perceive and define him.

Segregated Setting

Settings which provide for the education of children with a particular type of handicaps as defined by law, with no non-handicapped children enrolled.
Self

The whole of our being, the totality of who we are, including both the subjective (I) and objective (me) of our experience.

Self-Acceptance

The process of enhancing the self-concept in the sense of approximating it closer and closer to the self to reduce the discrepancies between the self and the self-concept.

Self-Actualization

A basic need having to do with creativity, the ability to handle problems (i.e., conflict, anxiety, frustration, sadness, hurt, and guilt), and a conscience (the person wants and enjoys what is good for him).

Self-Esteem

The possession of a favorable opinion of the self, or favorable self-concept.

Self-Image

Self-concept.

Subjective Public Identity

A person's own perceptions of the objective public identity


Lance, W. D. "Who Are All the Children." Exceptional Children, Vol. 43, No. 1, September, 1976.


Piers, E. V.; & Harris, D. B. "Age and Other Correlates of Self-Concept in Children." *Journal of Educational Psychology,* 1964, 55(2).


AUTOBIOGRAPHICAL STATEMENT
Anne P. Jaworski

EDUCATIONAL BACKGROUND

1976-1979 Doctor of Philosophy in Education
Evaluation and Research in Education
Wayne State University, Detroit, Michigan,
December 1979

1973-1974 M.A.T. Degree, Early Childhood Education
Oakland University, Rochester, Michigan

1972-1973 B.A. Degree, Psychology, Concentration in Computer
Science
Oakland University, Rochester, Michigan

1965-1969 B.A. Degree, Economics
Oakland University, Rochester, Michigan

PROFESSIONAL EMPLOYMENT AND RELATED EXPERIENCE

1979-Present Visiting Instructor (two-thirds), Research (one-third)
Early Childhood Education
Oakland University, Rochester, Michigan

1975-1979 Lecturer
Early Childhood Education
Oakland University, Rochester, Michigan

1974-1979 Teacher Director
Matthew R. Lowry Early Childhood Center/Toddler Program
Oakland University, Rochester, Michigan

1973-1974 Graduate Assistant/Data Analysis
Oakland University, Rochester, Michigan

RESEARCH

1979 In Progress The Effect of Mainstreaming on the Self-Concept of
Young Physically Handicapped Children

1976-1979 Studies II, III, IV - Toddler Spontaneous Play
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Rochester, Michigan