

A COMPARATIVE STUDY OF THE ATTITUDES OF NONHANDICAPPED  
PRESCHOOLERS TOWARD THEIR HANDICAPPED PEERS

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## DEDICATION

I wish to dedicate this dissertation to Cynthia Hammonds and Carrie Kobeck for they represent two of "Heaven's Very Special Children" and I will always treasure their memories as I worked with them when they attended the four-year-old program at the Child Service Center at Henderson State University.

### HEAVEN'S VERY SPECIAL CHILD

A meeting was held quite far from earth  
"It's time again for another birth."  
Said the angels to the Lord above,  
"This special child will need much love."

His progress may seem very slow,  
Accomplishments he may not show  
And he'll require extra care  
From the folks he meets way down there.

He may not run or laugh or play  
His thoughts may seem quite far away  
In many ways he isn't adept  
And he'll be known as handicapped.

So let's be careful where he's sent  
We want his life to be content  
Please, Lord, find the parents who  
Will do a special job for you.

They will not realize right away  
The leading role they're asked to play  
But with this child sent from above  
Comes a stronger faith and richer love.

And soon they'll know the privilege given  
In caring for this gift from Heaven  
Their precious charge, so meek and mild  
Is Heaven's very special child.

(Author Unknown)

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## CHAPTER I

### Introduction

One of the basic changes in educational theory and practice is the growing recognition of educational adjustment to individual differences. The meaning of equal opportunity has moved from the same method and standard for each child to the realization of providing the maximum opportunity for each child to learn and develop according to his needs and capacities (Elsen, 1959). With the implementation of the federal Public Law 94-142, The Education of All Handicapped Children Act of 1975, public education is beginning to focus on the complete educational process for every child. Regardless of the handicapping condition, the child must be provided for within the least restrictive environment possible. This law is not a totally new challenge to educators who advocate the developmental approach to Early Childhood Education; for within this approach teachers strive to meet the needs of all children with whom they work (Dickenson & Davis, 1979).

✓ When a handicapped child joins a regular classroom, it is important to think of him, first of all, as a child more like other children than different (Klein, 1973). Ultimately, exceptional children's weaknesses will become less

visible as their strengths and similarities with normal children are shifted into focus (McLaughlin & Kershner, 1979).

"Within a successfully mainstreamed classroom children learn that each child is capable of doing a great deal independently and that each child can offer help to another" (Dunlop, 1977, p. 182). The emphasis in the regular classroom on "normality" and on strengths as well as on weaknesses helps children learn that a disability is but one aspect of a person's life (Meisels, 1977).

Concerning this concept of mainstreaming, preschool children are finding "new" classmates who may be classified as handicapped due to a speech, hearing, vision, or motor impairment, or due to a learning, mental, or emotional disability. Research has dealt with the classroom teachers' and other adults' attitudes toward handicapped children, but little has been done regarding children's attitudes toward these handicapped children, especially when the focus is on the preschool level. Only recently have educators begun to study the effects of mainstreaming on handicapped and non-handicapped children (Meisels, 1977). The limited research may have been due to the difficulty of assessing attitudes of the young child. The commonly used Likert-Type-Scale and sociometric techniques, such as the sociogram, have numerous limitations (Macmillan & Semmel, 1977) when used with young children.



For many years Nursery Schools have included, without fanfare, handicapped children at the discretion of parents, teachers, and physicians. What is new is a critical examination of our goals in educating the handicapped as well as the best means of achieving those goals (Klein, 1975).

#### Statement of the Purpose

The purpose of this study will be to develop an instrument to assess the nonhandicapped preschooler's willingness and readiness for personal interaction with a child who displays a visible disability. The instrument will assess nonhandicapped children's attitudes; negative, positive, and/or indifferent, toward handicapped children with cerebral palsy, mental retardation, and other motor impairment. Two types of visuals will be presented to the two groups of children, with one-half of the three-year-olds viewing The Handicapping Information Inventory-Form A-Slides, and the other half of the three-year-olds and four-year-olds viewing The Handicapping Information Inventory-Form B-Video pictorial illustrations of these three kinds of handicapping conditions.

#### Hypotheses

The following hypotheses will be tested in this study:

Hypothesis 1. There will be no significant difference in the attitudes between the boys and girls in the three-,

and four-year-old groups in their responses to the two forms of the instrument.

Hypothesis 2. There will be no significant difference in the reactions of the children and the three handicapping conditions on the two instrument forms.

Hypothesis 3. There will be no significant difference in the attitudes between the boys and girls in the three-, and four-year-old groups in their responses to the two instrument forms toward the sex of the handicapped child.

Hypothesis 4. There will be no significant difference in the attitudes between the boys and girls in the three-, and four-year-old groups in their responses to the two instrument forms toward the age of the handicapped child.

## CHAPTER II

### Review of the Literature

Research in this area was not undertaken until the decade of the seventies and was stimulated by the passage of Public Law 94-142 (Education For All Handicapped Children Act). Therefore, this review of literature will not be limited to attitudes toward the handicapped, and will include: (a) early childhood mainstreaming; (b) influence of parental/familial attitudes toward the handicapped child; (c) influence of teachers' attitudes toward the handicapped child; and (d) influence of peer attitudes toward the handicapped child.

#### Early Childhood Mainstreaming

In the review of the literature on early childhood mainstreaming, few articles dealing specifically with preschool mainstreaming were found. Of these articles, the majority reflected a descriptive research approach describing particular programs or curriculum models, or they supported particular policies on preschool mainstreaming. Few experimental studies were undertaken.

Preschool mainstreaming was examined in two studies, both of which were concerned with mentally retarded children.

Kirk (1958) compared children in regular and institutional preschools with control groups who received no treatment. The subjects were 81 mentally retarded children between the ages of three and six, whose IQ's measured between 45 and 80. These children were studied for a period of three to five years. The following groups were used: (a) 28 students who had attended a neighborhood preschool were assigned to the Community Experimental Group; (b) 15 children who had attended an institutional preschool were assigned to the Institutional Experimental Group; (c) 26 children who did not attend a preschool (but like the others, were followed-up after entering regular school at age six) were assigned to the Community Contrast Group; (d) 12 children who did not attend any preschool (but were followed-up after admission to the institutionalized school at age six) were assigned to the Contrast Group at a different institution. Case studies of the experimental children and statistical comparisons of the two experimental contrast groups were conducted. The subjects in the various groups participated in both group sessions and received individual tutoring based upon personally diagnosed needs.

The study showed that preschool education did have a positive effect on mentally retarded children who had some type of psychosocial or environmental lag. Less impact was shown on those children possessing total organic disability.

The overall effects of preschool education on the development of young mentally retarded children were positive. Of the 14 cases in the study concerning organic defects, seven (fifty percent) accelerated their rate of growth; but 23 of the 29 children (seventy-nine percent) with no definitive diagnoses of organic disease made progress on one or more levels in growth on the Binet, Kuhlmann, and Vineland Scales.

Change of rate of growth under optimum education and home conditions appeared to be most effective with the culturally deprived cases. Least effective were students with organic pathologies uncomplicated by psychological or environmental factors. It appears that preschools for mentally handicapped children may not be necessary since the Community Contrast Group caught up to the Community Experimental Group after entering regular school at the age of six. The gap between the community and institutional groups, however, grew wider after a year of elementary school. In addition, the results showed that the positive effects of the early intervention availed little in the elementary years. Significance of the program study is limited due to sampling bias (the use of pre-established rather than randomized samples for comparison), the small sample size, and insufficient control for the effects of variables, an example being the curriculum.

Spollen and Ballif (1971) studied basically the same problem. Subjects were comprised largely of randomly

selected middle-class children with developmental lag, and were assigned to randomly selected treatment groups. The purpose of the study was to determine whether kindergarten children with developmental lags in the areas of general development, visual perception, language, and general cognitive readiness could be helped by a program of individualized instruction. Out of 717 middle-income suburban New York City children entering kindergarten, 135 were identified as having developmental lag when judged by the screening instrument which had been devised by the program coordinators. The instrument was devised to measure gross motor development, counting, number and color concepts, auditory and visual discrimination, visual motor coordination and body awareness. The subjects for this study included 94 of these 135 and were placed in an experimental kindergarten to receive individualized instruction. Forty-five went to six different regular kindergartens. An additional 45 non-developmental-lag children in regular kindergartens served as a control group of normals.

Each of the experimental kindergarten classes had 12 children, a teacher, and a teacher's aide. (Regular classes had 25 children and a teacher.) A monthly plan was developed for each child. At the end of the school year the children were tested again on the screening instrument, the Metropolitan Readiness Test, Illinois Test of Psycholinguistic

Ability, and the Frostig Test of Visual Perception. Data were analyzed by analysis of variance and covariance. There were no significant differences between the individualized instruction group and the developmental lag regular kindergarten group. Normals scored significantly higher than either the experimental or control group when tested on the Metropolitan Readiness Test. The authors concluded that the procedures and practices employed in a regular kindergarten were as effective as those of a program stressing individualization of instruction geared to developmental needs. Possible explanations included: (a) In order to affect differential growth rates, it may be necessary to conduct programs for longer than one year and/or classes for more than 12 hours per week; (b) More specific objectives and curriculum methods and materials may be needed; (c) For the nonculturally disadvantaged child, there may be innate differences in developmental rate which contribute substantially to the differences in general readiness level. School curriculums may need a range of objectives and tasks over the entire length of a child's school career to allow for differences in developmental rates. Or possibly a program started when these developmental lag children are three or four and lasting for two or three years might prepare them for the formal school program.

Insigificant differences were shown between the eight groups receiving individualized instruction in special education classes and those in six integrated regular kindergarten classes. The conclusion showed minor changes in both groups because their lag was organic rather than psycho-social. Collectively, these two studies suggest that (a) early intervention produces a positive effect; (b) that early intervention produces a greater effect when the child's retardation is more psychosocial than organic; and that, (c) placement in regular classes is as effective as placement in special classes.

Allen, et al. (1972) and Devoney, et al. (1974) studied the interaction between nonhandicapped and handicapped preschoolers with the hypothesis that socialization skills would improve when increased opportunities for interaction with nonhandicapped were provided the handicapped students.

Allen, et al. (1972) studied whether integration in a group composed of 50% normal peers would eliminate the maladaptive behavior of an emotionally-disturbed child. It further proposed to discover whether specific intervention procedures would be required for any of the behaviors, as well as how much data-gathering a supervising preschool teacher can manage without interfering with on-going activities. Julia, the subject of the study, was three years and eleven months old when she was enrolled in the Model Preschool. She



was diagnosed as emotionally disturbed with no neurological impairment. Each of the child-teacher interactions were videotaped. The study was conducted from September 30th to December 7th. The results of the study showed a rapid, steady decrease in negative, disruptive social behavior once specific intervention was begun; cooperative play increased in the final phase of intervention. The conclusions drawn showed that progress is rapid where the intervention is specific and when there are normal peers to serve as models for appropriate behavior; also, that the cost in teacher time seemed reasonable. This study is an excellent example of a replicable case study. It provides information not only on the efficacy of mainstreaming, but on specific intervention tactics and the teacher's role.

Devoney (1974) examined increases in the social play of handicapped preschool children by introducing nonhandicapped children into the special classroom and by providing structured activities. Seven handicapped children, with varied ranges of verbal and emotional handicaps, were permitted to interact three times a week during their free play period with five nonhandicapped students from the same private preschool program. The seven handicapped preschoolers were studied under three conditions: (a) structured play among themselves; (b) unstructured play with five normal preschoolers; and (c) structured play with the normal children. The

seven handicapped children were individually rated on a social play scale which ranged from isolated play to cooperative play with a rating of six being the highest. Under the same sequence of events the percentage of time spent in associative and cooperative play was noted. Ratings were conducted by a teacher with occasional check on reliability by an outside person. The graphs which were presented showed each student's average progress. During baseline conditions, the average play rating was three; during unstructured, integrated play, social play slightly improved, with only one student improving more than one step. During integrated, structured play, a noticeable increase in play occurred, with all children showing significant gains with the average rate stabilizing at five. Success of the structured, integrated play was indicated by the fact that five out of seven children spent 75% or more of their time in association or cooperative play. An additional benefit observed by the teacher was that when handicapped children were left by themselves in their special classroom, they interacted more frequently among themselves and modeled their play after the more sophisticated play of the nonhandicapped children. Results of the study indicated that nonhandicapped preschool children could serve as effective models for handicapped children for development of play behavior. Interaction between the two groups produces a substantial increase in both the quantity

and quality of play in the handicapped child.

These two studies of Devoney (1974) and Allen (1972) are significant in that they: (a) Demonstrate the research-service model. (b) Demonstrate the use of direct observation of behaviors and the effectiveness of particular kinds of intervention. (c) Demonstrate the need for direct intervention to increase social interaction. (d) Demonstrate the significance of the effects of modeling behavior of normal children. Further, these studies, concerning methodological issues, show that: (a) Group comparisons are contrasted with intra-individual comparisons. (b) Process testing is used rather than product testing. (c) The Hawthorne Effect is used advantageously with every child being a part of the experimental model. (d) The model includes both evaluative data and planning models. (e) The data-collecting instrument employs the use of direct observation.

There is a paucity of studies regarding early childhood mainstreaming, especially prior to the passage of Public Law 94-142. Nevertheless, the literature concerning preschool mainstreaming is generally evaluative because it is dependent on the synthesis of the author's experience in which his conclusions and judgments are often more intuitive than researched. This agrees with Dunn's (1969) statement that more evidence than proof is given concerning the value of mainstreaming. It does allow for the following

generalizations: (a) All available studies favored some type of integration. (b) A more structured curriculum is in evidence as opposed to that found in the traditional nursery school. (c) Individualized instruction for all children, whether handicapped or not, is strongly emphasized. (d) Children's diverse needs are met through a variety of methods and techniques. (e) No ideal system exists concerning integration, ideal degree in integration, nor ideal curriculum. (f) The integrated program's success is almost totally dependent upon the teacher's ability and attitude. (g) Parental influences and cooperation are considered vital in most of the programs. As society becomes more accepting of the handicapped, parents tend to become more assertive in seeking outside help. Parents of handicapped children tended to view the process of mainstreaming in relationship to their individual needs, the educational and emotional needs, and the placement option alternatives of full day and/or partial day. Of key importance to parents concerning the school environment for their handicapped children is the presence of a positive and harmonious attitude among the school administrators, classroom teachers, and all the children attending the school (Bates, West, & Schmerl, 1977).

Several articles were found in the review that dealt with general strategies and suggestions for teachers and administrators. Although the articles do not compare

experimental and control groups to the traditional research model, they offer descriptive statements that are valuable in obtaining a consensus of opinion regarding early childhood mainstreaming. Several descriptive summaries follow:

(a) Yule (1963) stressed the importance of self-image, peer relationships, and the need for support systems. (b) Burke (1970) suggested through the use of the case study that these children be mainstreamed into the regular preschool classroom. The importance of family involvement was also stressed as being a factor in relationship to a child's success. (c) Christopherson (1972) made administrative comments on the "whys" of her successful laboratory program which had been in operation for a total of ten years. She emphasized the importance of the teacher's emotional stability and stressed the need for working with the child and his/her family. (d) Beller (1973) described the ideal type of classroom for emotionally disturbed preschoolers, and suggests this as being useful for normal children, too. (e) Pollack and Ernst (1973) gave suggestions for dealing with hearing-impaired preschoolers. Stress was focused on the need for parent-teacher interaction. (f) Swap (1974) reported on the progress of children with special needs in regular preschool classes and based her model on the developmental stages by Erikson and the academic stages described by Hewett. She also described basic characteristics of special children and

gave guidelines for dealing with them. (g) In 1974, Tait described requisites for teaching blind kindergarteners.

(h) Luterman and Luterman (1974) discussed the requirement for deaf children entering a special school and gave advice and suggestions for teachers.

There is evidence that the educable retarded child benefits from placement in the regular classroom. Filler, et al. (1975) studied the need for special class placement and stated that the educable retarded child accomplished generally as well academically if allowed to remain in the regular classroom. However, the humanitarian's plea that the retarded child's social and personal adjustment would improve if he were placed in a special class without frustrating pressure has not been empirically validated.

Abeson, Burgdorf, Casey, Kunz, and McNeil (1975) reported that one single educational system should not be established to serve all children, for this is unrealistic in nature. Abeson (1976) voiced the opinion that separate classes are not the acceptable environments for even the most severely handicapped without giving consideration to the factor of least restrictive programming.

Mainstreaming from the legal, educational, and ethical perspectives has been reviewed by Bricker (1978) and Meisels (1978). The emphasis was centered around the rights of each child, regardless of the handicapping condition, to receive

an education in the most normal and appropriate setting. Meisels (1977) considered the rationale of mainstreaming legally, morally, socioculturally, and educationally. Through legal means, mainstreaming helped the handicapped child obtain equality of educational opportunity as well as ensures protection under the law. Morally, mainstreaming helped to reduce isolation and prejudice while enhancing understanding and acceptances of differences. Through the sociocultural aspect, mainstreaming helped the handicapped child contribute to, as well as receive from, and participate in today's society. From the educational viewpoint, mainstreamed classrooms helped to provide the handicapped child with positive peer relationships and experiences.

Howard (1977) concerned himself with the evaluation of mainstreaming and questions the criteria used in evaluating the over-all purpose of mainstreaming. McLaughlin and Kershman (1979) viewed the purpose of mainstreaming as enhancing the broadbased acceptance of individual differences. Ultimately, this philosophy will help us recognize exceptional children from a more realistic viewpoint; thus, their ". . . weakness will become less visible as their strengths and similarities with normal children are shifted into focus" (McLaughlin & Kershman, 1979, p. 54).

Project Head Start was in the forefront in reference to the recognition of the need for handicapped children becoming

involved in a preschool type environment. A mandate established in the 1972 Amendments to the Economic Opportunity Act stated a requirement that 10% of all Head Start children be handicapped (Cohen, 1975). With the regulations of Public Law 94-142 required of each state department of education, Project Child Find was implemented in an effort to locate and identify handicapped children of school age. It has also been stressed that the project included young children from the ages birth to four. This screening process to help find handicapped children would be useful at these earlier ages to prevent handicapping conditions from becoming "cumulative" (McLaughlin & Kershman, 1979).

Brown, Branston, Hamre-Niltupski, Johnson, Wilcox, and Gruenewalk (1979), in reference to severely handicapped children, argued that since public schools were the only surroundings which provided for daily interaction between non-handicapped children, then this environment is also the least restrictive for them. Sontag, Certo, and Button (1979) were of the opinion that the legislative mandate did require the placement of severely handicapped children in public schools; therefore, segregating them violated their constitutional rights. Brown and his colleagues emphasized that these children lost valuable skills needed later in order to function productively within the community.



Burton and Hirshoren (1979) opposed this integrated approach and argued that mildly handicapped children were socially rejected by their peers and as the intensity of the handicap increased, so did peer rejection.

### Influence of Parental/Family Attitudes

Parental/family attitudes can greatly enhance the learning achievements of a handicapped child. Calvert (1971) described the rationale for parent involvement and states that the more the parent participated in the child's program the greater the possibility for learning achievement. Bronfenbrenner (1975) similarly responded that parent involvement during these early, formative years produced a long-range impact. He also reminded the reader that there were always exceptions.

Parental attitudes, influenced by society's attitudes, and the services available to handicapped children have undergone much change throughout the years (Bates, West, & Schmerl, 1977). Some parents of normal children had a difficult time accepting the handicapped child in the regular classroom due to their questioning attitudes concerning the impact on their normal child. At the other end of the continuum, parents of normal children felt an extra sense of gratitude and tended to instill a sense of courage in parents of handicapped children.

In relationship to the handicapped child's dependency on his parents, the parents may feel threatened at having allowed their child a sense of independence. "They may thereby be freed, however, to admit how hard it has been to live with their child's problem in the past" (Christopherson, 1972, p. 140).

McLaughlin and Kershman referred to the parent's interaction with their handicapped children and maintained that the learning achievement of a handicapped child is directly related to the parent's overall involvement with the child's "schooling process." The parental involvement . . . "degree to which the child's parents are involved in the program increases the chances for its success" (McLaughlin & Kershman, 1979, p. 61).

Lowenthal suggested that parents could demonstrate many basic concept acquisition skills within their homes, for she believed that a child's attitude toward learning originated in the home. Therefore, . . . "the home is an important place which reinforces the school" (Lowenthal, 1974, p. 185).

Since mainstreaming is a relatively new concept, limited literature is available concerning parental attitudes. In October 1975, an attitudinal survey type scale was conducted in Washtenaw County (Minnesota), asking 35 families of handicapped children the following questions: "Do you prefer that you children be in (1) a regular class full-time with

supportive help, (2) a special class full-time, or (3) part of the day in a regular class and part in a special class?" According to the results, 24 of 35 families chose mainstreaming as the educational program for their children at least a portion of the day, regardless of the degree of the handicapping condition. The weakness of the study is seen in that the parents were not representative of all parents of handicapped children, and there were several sources of bias in this sample. The strength of this research lies in the fact that these parents represented an active group who will be helpful in providing background information for special education professionals as well as for society in general.

Concerning the reasons for allowing their children to be mainstreamed, the parents made the following comments: (a) Children should begin to experience the feeling of mainstreaming since their adult lives will probably be affected by this interaction; (b) This was the best type placement for their children, even though some saw this as a semi-permanent to temporary arrangement; (c) This type of child would most likely benefit from the modeling of normal peers. Overall, these parents based their viewpoints concerning the mainstreaming alternative as dependent upon their individual child, his intellectual and emotional needs, and the type of placements which were available. Of prime importance, the parents felt that the fostering of positive attitudes from

school personnel, teachers, and children were vital to the overall success of any type of program dealing with the special child (Bates, West, & Schmerl, 1977).

Parent groups have been influential in helping to change attitudes and provide services for the exceptional individual. In reference to Kelman's theory of the group effort being the effective means for parents of handicapped children, it was found that individually they may not be able to accept a person with handicaps, possibly because of guilt, preconceived myths about the handicapped, and the underlying fear of their ability to cope with the problems of handicaps (Bates, West, & Schmerl, 1977).

Klein (1975) emphasized the importance of supporting and encouraging parents, for she pointed out that these parents had additional problems such as, little developmental understanding of the handicapped child's general growth and development and the difficulty they experienced in their ability to communicate with a child who is often nonverbal. In summary, she commented that parents and teachers must effectively communicate and support one another in working with the handicapped child.

### Influence of Teachers' Attitudes

The attitude of the teacher sets the tone of the classroom environment. Reynolds (1976) and Haughton (1976) found

that teacher training programs which focused on educating students to the concepts of mainstreaming required the development of skills and positive attitudes toward mainstreaming in order to accept the concept. Teachers trained to work with handicapped pre-schoolers are especially needed where they can serve as major models for learning (Levitt & Cohen, 1976).

How do teachers feel about children with disabilities? Teachers, like most other people, feel uncomfortable and unsure concerning their own behavior and tend to avoid these types of children (Cohen, 1977). The AID curriculum, Accepting Individual Differences, was created in 1974 with the objective of fostering receptivity toward the handicapped. This curriculum was designed for grades K-2, and it has since been expanded to include grades 3 and 4. "The position in the AID curriculum is: There's nothing to be ashamed or afraid of. There's much to be dealt with" (Cohen, 1977, p. 12). During 1975-76 this program was implemented in six kindergartens throughout the various schools in New York State. The program curriculum includes learning experiences for teachers and pupils. After the program had been implemented, the pupils were shown a video tape of children with cerebral palsy. Four open-ended questions prepared by project staff members were asked by the teacher to elicit the children's reactions to the video tape. They are as follows:

(a) Tell me about the television program you just saw. (Additional clue: Tell me about the children.) (b) Why couldn't most of the children you saw on the program move around as you can? (c) What kinds of things did the children use to help them? (d) Remember the girl Maria? Who can tell me what he or she thinks Maria is like? What does Maria do when she gets home from school? The video tape was shown to another class in which the AID program had not been implemented, and these same questions were asked. The control group differed in responses as compared to the experimental group in the following areas:

In reference to the question of what they thought Maria did after school, children in the control group only mentioned activities related to her disability, but the experimental group stated that Maria would play with friends. Similar comments were voiced in reference to the other questions with the control group making reference to the disability and the experimental group making reference to Maria as a child whose interests and activities were very much like their own.

In one school where mainstreaming was being implemented, the teachers made the following list of additional new skills which were needed: (a) Arrange with parents for special needs and nonspecial needs children to play together outside of school. (b) Individualize the curriculum for all children. (c) Establish respect for individuals as the prime classroom value. (d) Create a safe, protected environment so that children can risk forming relationships. (e) Explain individual differences to children in a neutral,

value-free manner. (f) Read aloud books and stories that deal with differences. (g) Answer children's questions directly and honestly. (h) Reinterpret actions for children in behaviorally observable terms (e.g., "His legs don't work very well" or "It's hard for her to hold your hand without squeezing it"). (i) Design and guide positive interactions between children based on a common interest or curricular experience. (j) Encourage all children to talk about feelings such as fear and anger and help them begin to understand and govern these emotions. (k) Encourage spontaneous dramatic play and role playing to help nonhandicapped children identify with the experience of special needs children (e.g., using crutches, walkers, or hearing aids; crawling or limping). (l) Create opportunities for parents to meet together to discuss their reactions to mainstreaming and their common concerns about parenting. Teachers, in effect, become the key partner in the success of mainstreaming along with the interaction of parents and peers.

Stephens and Braun (1980) developed a questionnaire to obtain information concerning the teachers' training, their prior experiences with exceptional children, and their attitudes toward these children. These questionnaires were distributed to ten randomly selected districts in the Southwest Cook County (Illinois) Cooperative for Special Education. The teachers who had taken courses in special education were

more willing to accept handicapped students in their classes (p .01) than were those who had not taken courses. "Those confident of their abilities to teach exceptional children were more willing to integrate them than were teachers who were not confident" (Stephens & Braun, 1980, p. 293). The teachers who believed that handicapped children can become useful members of society were more willing to integrate these children than were the teachers who did not share this philosophy (p .01). Also, those teachers who believed that public schools should educate exceptional children were more willing to involve them into their classrooms than those who did not share this belief (p .01).

In summary, . . . "It appears that sex, age, marital status, size of municipality of residence, number of years since earning bachelor's degree, years of teaching experience, presence of exceptional children in the family or neighborhood, teaching experience in a school in which there were special education classrooms, and experience in recommending students for special education evaluations were not significantly related to classroom teachers' attitudes toward integrating handicapped children into regular classrooms. (Stephens & Braun, 1980, 292-293)

### Influence of Peers' Attitudes

While it had been suggested that labels cause added negative attitudes toward handicapped children placed in regular classrooms (Haywood, 1971; MacMillian, 1977), studies of preschool children in integrated classrooms suggest that they are rejected by their nonhandicapped peers (Cooke,



Apolloni & Cook, 1977; Devoney, Guralnick & Rubin, 1974; Guralnick, 1976; Porten, Ramsey, Tremblay, Iaccobo, & Crawlye, 1978; Ray, 1974; Snyder, Apolloni & Cooke, 1977). There is also data which suggests that prejudices may have a perceptual-cognitive basis. "Simply, it may be suggested that the roots of prejudice and rejection of handicapped children may lie in the tendency to respond differentially to difference" (Thurman & Lewis, 1979, p. 468).

While training has proved effective in helping to overcome patterns of prejudice (Devoney, Guralnick, & Rubin, 1974; Guralnick, 1976), no data have been presented to show that these changes endure and, in turn, that these prejudices are resumed.

Billings (1963) evaluated the attitudes of noncrippled elementary children toward crippled ones in his study using the story technique. Each child was to write a story about a crippled child and one about a noncrippled child. From the investigator's analysis, he found that noncrippled children displayed fewer favorable attitudes toward the ones who were crippled than toward the noncrippled, and that the "attitudes of older subjects toward the crippled was less favorable than that of younger ones" (Billings, 1963, p. 384).

Rapeir, Adelson, Carey and Croke (1972) evaluated the effect of integrating orthopedically handicapped children in an upper-elementary class and found that nonhandicapped

children can develop a positive attitude toward handicapped children if the school experiences are integrated in a positive and reinforcing manner.

Justman and Maskowitz (1957) found that nonhandicapped children have a negative attitude toward their hearing-impaired classmates, but Kennedy and Bruininks (1974) found, in a somewhat similar study, no difference in the attitude of nonhandicapped children toward their hearing-impaired classmates.

Jones, Lavine, and Shell (1972) studied the effects of acceptance of blind children in the classroom and found the ratings for most blind children to be below the median. "In cases where ratings were higher, the nonhandicapped children who had shown preference for blind children were themselves generally rejectees or isolates" (p. 77).

An investigation by Jones and Sisk (1967) focused on the age at which recognition of disability first occurs. Their evaluative measure included a drawing of a child wearing a leg-brace and a second drawing of an identical child without braces. Children, ages two to six, looked at the drawings and responded with their perceptions of the two pictures. The researchers concluded that four is the age at which awareness of physical handicap first appears. Four- and five-year-olds perceived the disabled child as less likely to have fun at a carnival. Five-year-olds also

rejected the drawing of the disabled child more frequently than the normal one. "It is less likely that awareness of other, less obvious types of handicaps, occurs somewhat later" (Levitt & Cohen, 1976, p. 172).

Hartup (1978) stressed the importance of peer socialization processes for handicapped children, for this is necessary for the future development of social and communicative skills. Presumably, handicapped children will learn by imitating the skills of their normal peers (Peterson, Peterson, & Scriven, 1977).

Peterson and Haralick (1977) studied the behavior of nonhandicapped and handicapped children during freeplay. The researcher observed that although both handicapped and nonhandicapped children most often chose to play with nonhandicapped children, considerable social interaction took place between the two groups. In conclusion, the handicapped child was not the preferred playmate of the nonhandicapped.

Until disabled persons are seen as individuals who, like all people, have differing skills, interests, and personality traits, the ultimate outcome of legislation mandating integration and equal opportunity will be unpredictable - handicapped persons will continue to bear the consequences of unfavorable expectations and fear on the part of persons who control their life opportunities." (Donaldson, 1980, p. 504)

## CHAPTER III

### METHOD AND PROCEDURE

The assessment of nonhandicapped preschoolers' willingness and readiness for personal interaction with children who have one of the three handicapping conditions: cerebral palsy, mental retardation, or other motor impairment, are presented. The following are discussed: (a) population, (b) design and data collections, and (c) statistical analysis.

#### Population

The subjects in this study were thirty-six three- and four-year-old children enrolled in two classes in a university-sponsored nursery school program. Sixteen three-year-old children and twenty four-year-old children participated in this study. The participating children represented various socioeconomic levels; and acceptance into the Nursery School program is not affected by race, socioeconomic status, handicapping conditions, or educational background of the parents. Preference was made to equal number of males and females, e.g., 8 boys and 8 girls; 10 boys and 10 girls.

The children enrolled in the university nursery school program are ones that live in the surrounding community. Parents elect to send their children to the nursery school and pay a semester fee in order for them to attend. Prior applications must be made to reserve placement in the program due to the limited number of spaces available and the popularity of the program.

Emphasis is placed on obtaining at least 10 percent handicapped children into the program and these children are given priority over nonhandicapped children. A major reason for this is the fact that the various departments at the university also work with the children, either through therapy (speech, hearing, physical, education) and/or child case studies. Any type of handicapping condition is accepted so long as the child is able to benefit from the program.

Parents of the children in the study have viewed both the slides and videotape and are familiar with the assessment procedure. Each of these persons were given opportunity to ask questions concerning any of the assessment techniques and the researcher in turn answered these. Before the testing began, the parents completed the form concerning the background information in regard to their child's interaction with handicapped individuals (see Figure 9).

The three-year-old group of children was randomly divided by mixing three-year-old boys' and girls' names in a round cereal box, then selecting the name of three boys and five girls, and assigning these subjects to the slide portion of the study. The remaining names of four boys and four girls were assigned to participate in the videotape portion of the study. A similar procedure was followed in selecting the four-year-old subjects with the names of four boys and four girls assigned to the slide portion of the study, and the remaining four boys and girls assigned to the videotape portion of the study.

To select the sequence for the placement of the five schematic faces used in the study, a die was thrown to assign randomly the numbers for the slides and videotape. The schematic faces for the slide portion of the study were presented to the children in the sequenced order and coded as 5, 3, 2, 1, and 4 (see Appendix A); with 5 representing a great face, 3 representing a so-so face, 2 representing a pretty bad face, 1 representing a really bad face, and 4 representing a pretty good face. For the videotape portion of the study, the schematic faces were presented to the children in the order of 3, 5, 4, 2, and 1. This code represented the same numeric values as that for the slide portion of the study.

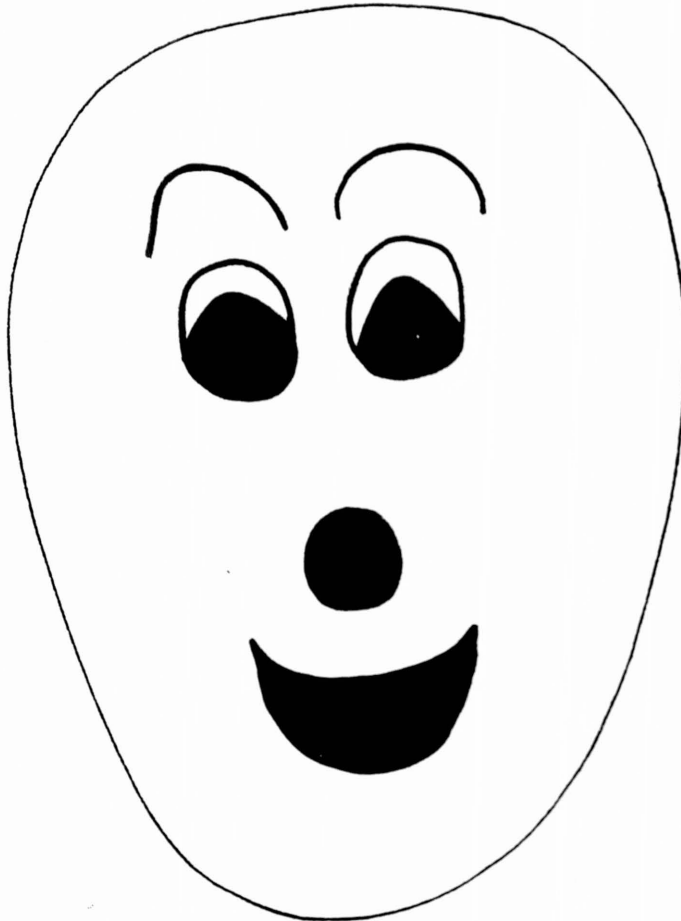
The children were identified by code numbers which contained three digits. The first digit identified the portion of the study - S (slide) or V (videotape); the second digit identified the age of the child, 3 or 4; and the third digit identified the sex of the child, M (male) or F (female). Therefore, a subject identified as S3M, was a three-year-old male child who participated in the slide portion of the study.

### Instrument Design

There are two basic forms to the instrument design for this study. The first one is The Handicapping Information Inventory-Form A-Slides including the following basic components: attitude faces, slides, form A-slides record sheet, and a box puppet.

Attitude faces - The five facial expressions will represent a great face, a pretty good face, a so-so face, a pretty bad face, and a really bad face. Each of the faces will be colored a neutral tone, thus portraying no racial distinctions. The facial shapes will be made of poster-board which has been colored a neutral flesh tone and the facial features will be made from fine-grained sandpaper. These faces originally were developed by Dr. Lachance, Rutgers University, College of Agricultural Science. (see Figures 1-5)

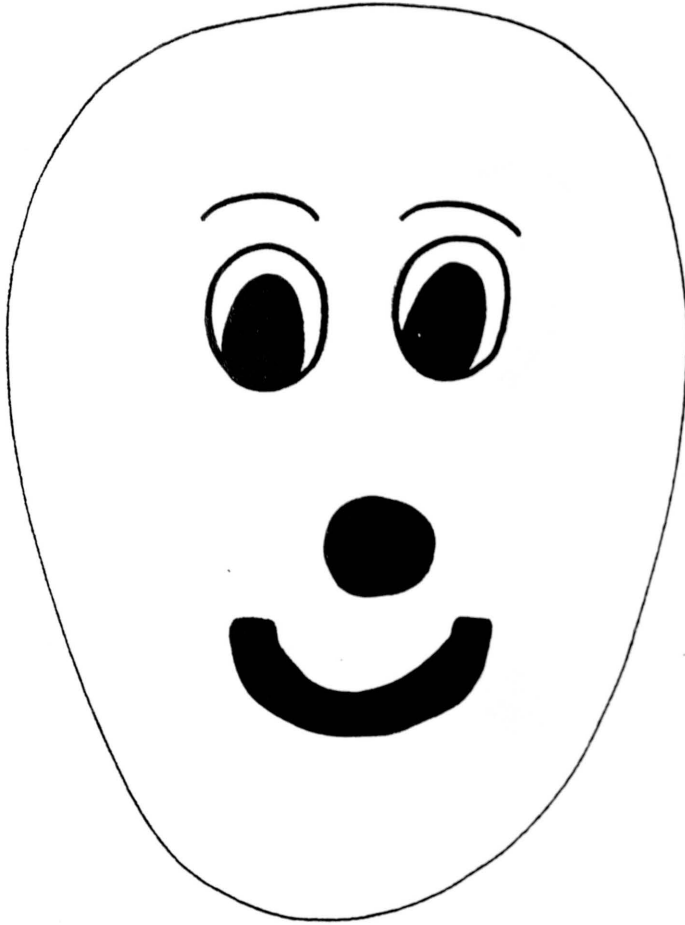
Figure 1



GREAT - Value 5

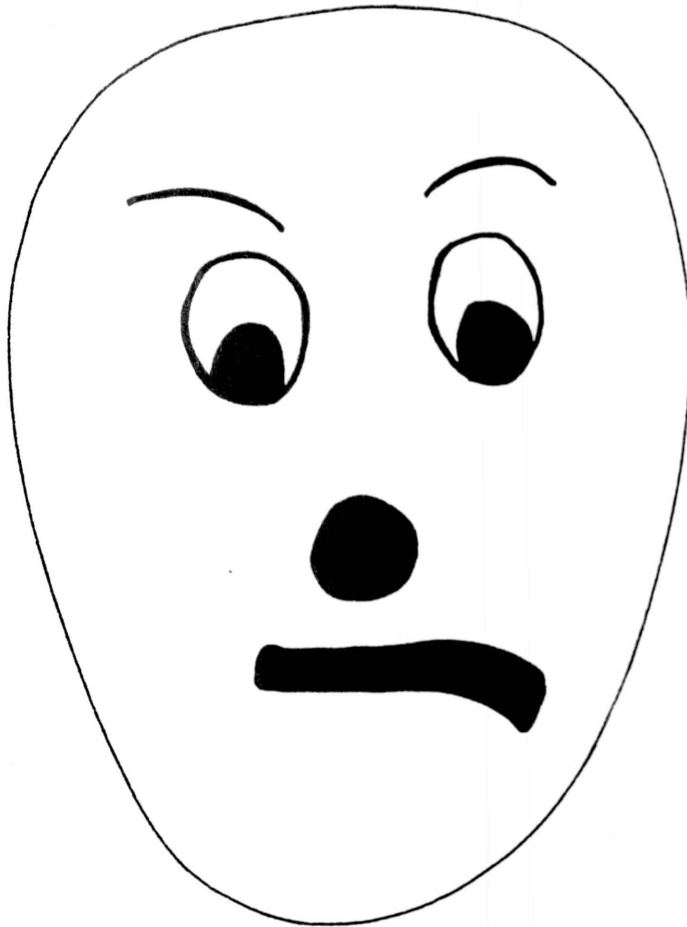


Figure 2



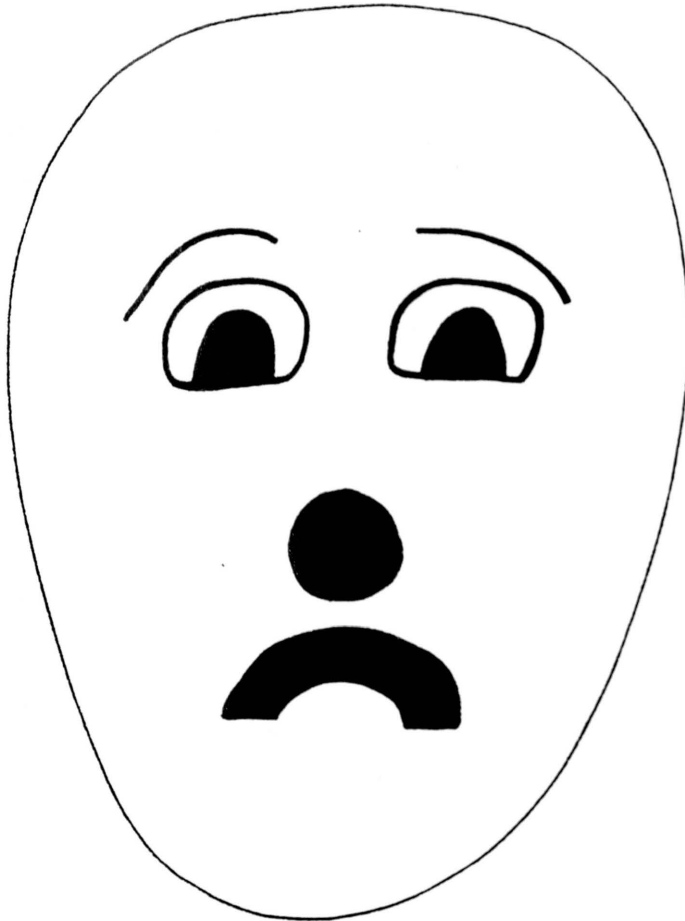
PRETTY GOOD - Value 4

Figure 3



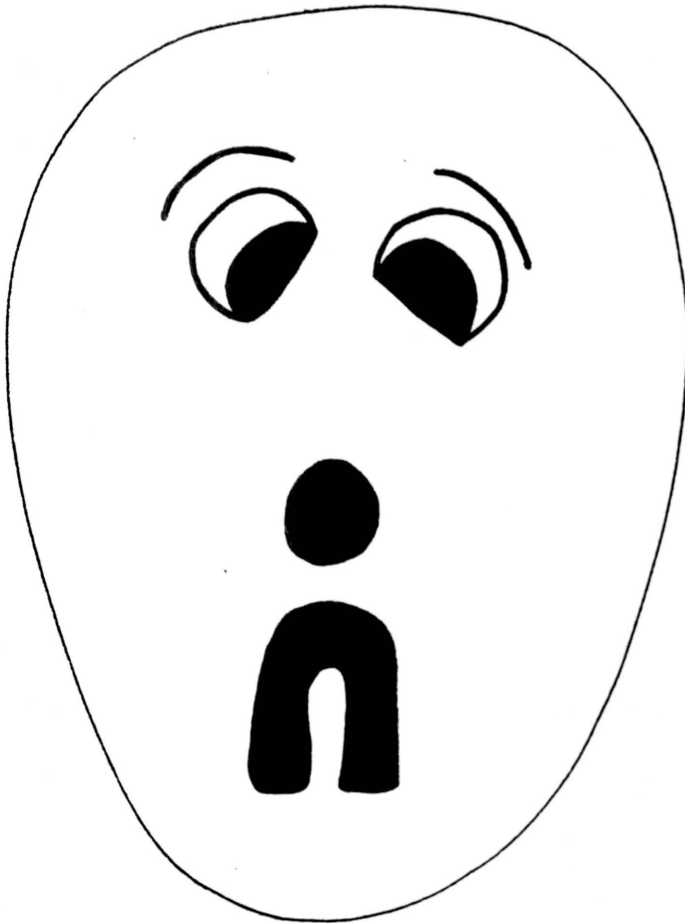
so-so - value 3

Figure 4



PRETTY BAD - Value 2

Figure 5



REALLY BAD - Value 1

Slides - Six slides showing children with cerebral palsy, mental retardation and motor impairment (wheel chair) will be shown. Two slides, one portraying a boy and the other a girl, will be shown of each disability. All children will be stationary.

Form A-Slides record sheet - This record sheet describes background information of each child in his/her relationship with handicapped persons. It also provides for codifying the subjects' responses. A specimen copy is presented in Figure 6.

Box puppet - The box puppet is made from styrofoam and includes features with table tennis ball eyes which have blue felt pupils and prominent lashes, and a mouth shaped like a diamond which is made from red felt. The back of the puppet is designed so that it may be manipulated by the index, middle finger, and thumb. (see Figure 7)

The second basic form of the instrument design is The Handicapping Information Inventory-Form B-Video and includes the following basic components: attitude face, videotape, Form B-Video Record Sheet, and a box puppet. The only difference between the components of Form A and Form B is the record sheet and that difference is that it designates that the recorded materials concern responses pertaining to the videotape instead of the slides. (see Figure 8)

Figure 6

FORM A-SLIDES

Child: \_\_\_\_\_ Age: \_\_\_\_\_

Does the child have any handicapped person/persons living within his home? If so, list the type of handicap and the age and relationship of the person. \_\_\_\_\_

Has the family ever been exposed to any handicapped person? \_\_\_\_\_yes \_\_\_\_\_no If so, under what circumstances? \_\_\_\_\_

Schematic faces identified correctly? \_\_\_\_\_yes \_\_\_\_\_no

Questions asked by child concerning the slides.

Questions asked by child concerning the summaries.

		Value
<u>Code for responses:</u>	<u>Great</u> . . . . .	5
	<u>Pretty Good</u> . . . . .	4
	<u>So-So</u> . . . . .	3
	<u>Pretty Bad</u> . . . . .	2
	<u>Really Bad</u> . . . . .	1

MR  
M F

WC  
M F

CP  
M F

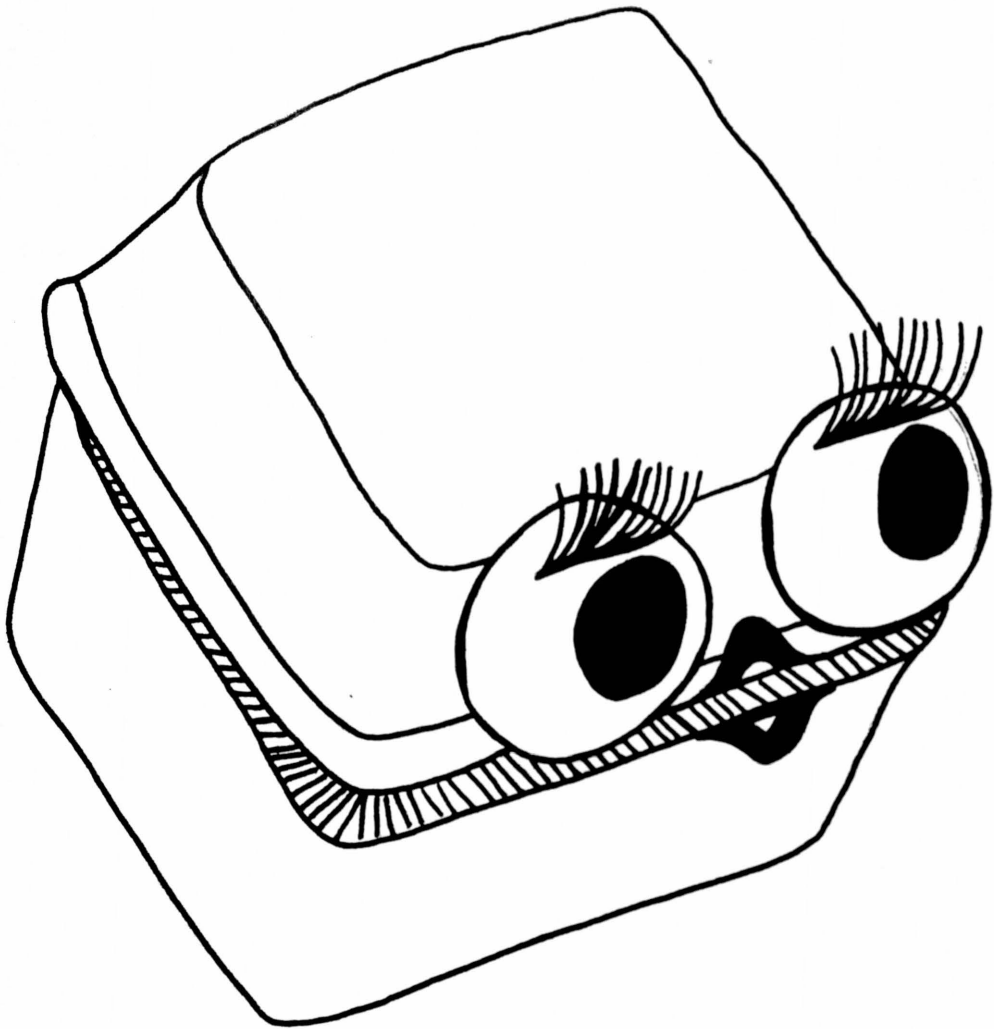
House

Classroom

Movies

<u>Code for letters:</u>	MR . . . . .	Mentally Retarded
	WC . . . . .	Wheel Chair
	CP . . . . .	Cerebral Palsy
	M . . . . .	Male
	F . . . . .	Female

Figure 7



BOX PUPPET ILLUSTRATION

Figure 8

FORM B-VIDEOTAPE

Child: \_\_\_\_\_ Age: \_\_\_\_\_

Does the child have any handicapped person/persons living within his home? If so, list the type of handicap and the age and relationship of the person. \_\_\_\_\_.

Has the family ever been exposed to any handicapped person? \_\_\_\_\_yes \_\_\_\_\_no If so, under what circumstances?

Schematic faces identified correctly? \_\_\_\_\_yes \_\_\_\_\_no

Questions asked by child concerning the videotape.

Questions asked by child concerning the summaries.

		Value
<u>Code for responses:</u>	<u>Great</u> . . . . .	5
	<u>Pretty Good</u> . . . . .	4
	<u>So-So</u> . . . . .	3
	<u>Pretty Bad</u> . . . . .	2
	<u>Really Bad</u> . . . . .	1

MR  
M F

WC  
M F

CP  
M F

House \_\_\_\_\_

Classroom \_\_\_\_\_

Movies \_\_\_\_\_

<u>Code for letters:</u>	MR . . . . .	Mentally Retarded
	WC . . . . .	Wheel Chair
	CP . . . . .	Cerebral Palsy
	M . . . . .	Male
	F . . . . .	Female



Videotapes - Six video sequences, which run for a time span of two minutes each, will be used to portray cerebral palsy, mental retardation, and motor impairment (wheel chair). Two videotapes, one showing a boy and the other a girl, will be shown of each disability. Two of the tapes will show stationary children, two will show children eating, and two will show children playing.

#### Pretest of Attitude Faces

Prior to administering the test, the children will have previously been tested by the researcher to evaluate each child's ability to discriminate between the five facial expressions. The children will be asked to explain how each face is different and also to tell the researcher which facial expression is represented when she calls aloud the names which the faces portray. Each child will successfully complete this portion of the study before the regular testing procedure of Form A-Slides and/or Form B-Video will be administered.

#### Children's Responses as Recorded on Record Sheets -

The three- and four-year-old children's parents' responses will be recorded on the slide and videotape record forms and summations will be presented. (see Figure 9) These responses will be divided by both the age of the subjects, as well as the two record forms (slides and videotapes).

Figure 9

PARENTS' RESPONSES TO RECORD SHEETSAre handicapped persons living in the home?

Slides:	3's	yes	<u>2*</u>	no	<u>6</u>	4's	yes	<u>0*</u>	no	<u>8</u>
Videotape:	3's	yes	<u>0*</u>	no	<u>10</u>	4's	yes	<u>0*</u>	no	<u>10</u>

Has child been exposed to handicapped persons?

Slides:	3's	yes	<u>3**</u>	no	<u>5</u>	4's	yes	<u>3**</u>	no	<u>5</u>
Videotape:	3's	yes	<u>2**</u>	no	<u>8</u>	4's	yes	<u>4**</u>	no	<u>6</u>

\*Types of handicapped persons living in the home of three-year-olds:

- Sister of child in class (kidney removed and on kidney machine)
- Mother of child in class (cancer victim and is now deceased)

\*Types of handicapped persons living in the home of four-year-olds:

- None

\*\*Exposure to handicapped persons by three-year-olds:Slide Subjects

- Sister of child in class-kidney problem
- Mother of child in class-cancer
- Acquaintance with father's employees in wheel chair and on crutches
- Persons in wheel chairs (adults and friends of two children)

Videotape Subjects

- Persons in wheel chairs (adults and friends of two children)
- Exposure to nursing home patients with assorted handicaps (father is administrator)
- Child's grandmother has one arm amputated

\*\*Exposure to handicapped persons by four-year-olds:Slide Subjects

- Person in wheel chair (adult and neighbor to child)
- TV viewing on Sesame Street (child saw a variety of handicapping conditions - adults and children)
- Child plays with a deaf child when he is not in school

Videotape Subjects

- Persons in wheel chairs (adults and friends of two children)
- Persons having Down's Syndrome (adults and neighbors to two children)
- Person having polio and is on crutches (adult and relative to child)

Comments by the parents were voluntary, but all responded to the questions.

### Administration

Form A-Slides (no sound was used) - Attitudes of half of the preschool students from both the three- and four-year-old groups in the study were measured using five schematic drawings of faces: one portraying a great face; one portraying a pretty good face; one portraying a so-so face; one portraying a pretty bad face; and one portraying a really bad face. Prior to implementing the procedure, each student was asked to point to each of the five facial expressions as the examiner called out the various labeled names. Instructions were stated to touch each of the five faces and to look at the differences in their eyes and mouths.

Each child was interviewed individually in a distraction-free environment on the university campus which is next door to the nursery school. The children were familiar with this building and used this facility when films were shown or when the weather was too severe for the children to play outdoors. The testing was administered by the researcher in this building during the regular school hours, Monday through Friday, from 9:00 a.m. to 12:00 noon. Testing began during the latter part of January and continued

for a two-week period or until each child had been evaluated. Application was made to the Human Subjects Review Committee at Texas Woman's University requesting permission to work with the children in the manner described, and approval was granted.

The following steps outline the design of this portion of the study using either Form A-Slides or Form B-Videotapes:

(1) The subjects viewed each of the schematic facial expressions individually and were asked to state which emotion each facial drawing represented (see Figures 1-5). The intent of the researcher was to introduce the drawings as neither male nor female. The subjects were shown pictures of the handicapped children and were instructed to point to one of the five facial expressions after hearing the verbal descriptions concerning the slides and/or videotape and after viewing the pictorial illustrations of the handicapped children. If the response was incorrect, the researcher explained to the child why each face had a special expression. The researcher then restated that the faces represented great, pretty good, so-so, pretty bad, and really bad facial expressions.

(2) Slides or videotapes of the handicapped children were shown and short summaries accompanying each slide were read to each subject to give basic information concerning that particular handicapping condition. Fictitious names

were used as a means of introduction.

The summaries are as follows: (They were presented in a randomized order.)

Mental Retardation - "Hello, my name is Joel. I am four years old. Sometimes I have a hard time understanding and have to be told how to do things many times."

Mental Retardation - "Hello, my name is Sara. I am four years old. Sometimes I have a hard time understanding and have to be told how to do things many times."

Wheel Chair - "Hello, my name is Jimmy and I am four years old. I move from place to place in a wheel chair because I can't use my legs."

Wheel Chair - "Hello, my name is Darla and I am five years old. I move from place to place in a wheel chair because I can't move my legs."

Cerebral Palsy - "Hello, my name is Jonathan and I am five years old. Sometimes I don't talk too plain and I need help in sitting up, eating, and walking."

Cerebral Palsy - "Hello, my name is Jennifer and I am five years old. Sometimes I don't talk too plain and I need help in sitting up, eating, and walking."

(3) The researcher began the interview by asking the child his name and age. The child was given the following

instructions:

"Let's look at the faces once again and play a game. Point to the great face. Point to the pretty good face, the so-so face, the pretty bad face, and the really bad face. You listened very well." Reinforcement was given in the form of praise.

(4) The child was then shown a box puppet named Jodi.

The following instructions were given concerning the puppet.

"Today I would like to ask you some questions about our friend Jodi. After I ask you each question, I want you to point to the face that best answers the question I have asked."

(5) The child was then shown the slides and the accompanying summaries were read. After each slide and summary, the child was asked whether he had any questions or comments concerning the picture and/or summary.

(6) Each child was then asked to respond to the following questions regarding the various handicapping conditions:

(a) "Now let's talk with Jodi. This child came to Jodi's house. Point to the face that shows how Jodi feels."

(b) "Now let's talk with Jodi. This child came to Jodi's house. Point to the face that shows how Jodi feels."

(c) "This is a new child in Jodi's class. Point to

the face that shows how Jodi feels."

(d) "This is a new child in Jodi's class. Point to the face that shows how Jodi feels."

(e) "This child wants to be friends with Jodi and wants to ask him to go to the movies on Saturday. Point to the picture that shows how Jodi feels."

(f) "This child wants to be friends with Jodi and wants to ask her to go to the movies on Saturday. Point to the picture that shows how Jodi feels."

### Scoring

A number value was given to each of the facial expressions: the number 5 designated the choice of the great face; the number 4 designated the choice of the pretty good face; the number 3 designated the choice of the so-so face; the number 2 designated the choice of the pretty bad face; and the number 1 designated the choice of the really bad face. The individual scores were added for a total composite score. There were a total of 18 responses per child.

Responses were recorded on the Form A-Slides Record Sheet or Form B-Videotape Record Sheet. (see Figures 6 & 8) There was a possibility of a score of 6 to 30. A score of 6 indicated a child who was basically unhappy with all three sets of the slides. A score of 30 indicated a child who was basically happy with all three sets of the slides.

### Statistical Analysis

The chosen statistical design compared collectively:

(a) the three-year-old students' great, pretty good, so-so, pretty bad, and really bad attitudes for all three handicapping conditions to the four-year-old students' great, pretty good, so-so, pretty bad, and really bad attitudes toward the handicapping conditions;

(b) the three- and four-year-old boys' and girls' attitudes toward the sex of the handicapped child; and

(c) the three- and four-year-old boys' and girls' attitudes toward the age of the handicapped child.

The data were analyzed for differences according to the test form and age and sex of the subjects. A  $t$  test for independent groups was utilized to analyze the differences observed. The data were tested at the chosen level of .05 level of significance.



## CHAPTER IV

### RESULTS

The purpose of this study was to develop an instrument to assess the attitudes of three- and four-year-old boys and girls toward handicapped individuals of the same age. One of two forms of the instrument, a slide presentation or a videotape presentation, was used in the assessment process. Attitudinal scores collected on each student are presented in Appendix A, Tables 16 and 17. The results are reported as comparisons of: (a) attitudes between boys and girls in the three- and four-year-old groups in their responses to slides and videotape; (b) attitudes of the children toward the three handicapping conditions (a mentally retarded child, a crippled child in a wheel chair, and a child with cerebral palsy) as rated on the slide and videotape; (c) attitudes between boys and girls in the three- and four-year-old groups in their responses toward the sex of the handicapped child as rated on the slides and videotape; and (d) attitudes between boys and girls in the three- and four-year-old groups in responses toward the age of the handicapped child as rated on the slides and videotape. A  $t$  test for independent groups was utilized in analyzing the observed differences with the data being

tested at the .05 level of significance.

### Description of Differences

Hypothesis 1 - There will be no significant difference in the attitudes between the boys and girls in the three- and four-year-old groups in their responses to the two forms of the instrument.

Two comparisons were tested: (a) attitudes of the three-year-old group as rated on slides and videotape; and (b) attitudes of the four-year-old group as rated on slides and videotape. Results are reported using this format.

Table 1

Attitudes of Three-Year-Old Boys and Girls  
in Their Responses to Slides vs. Videotape

Slides	Videotape
$\underline{N} = 48$	$\underline{N} = 48$
$\bar{X} = 3.29$	$\bar{X} = 2.93$
$\underline{SD} = 1.32$	$\underline{SD} = 1.58$
$\underline{t}$ ratio = 1.18 $\underline{df} = 94.00$ NS	

A  $\underline{t}$  ratio of 1.18 for the three-year-old boys and girls,  $p > .05$  (see Table 1) indicated that no statistically significant differences existed between the three-year-old children's attitudes toward the two test instruments. A mean score of 3.29 on the slide responses and 2.93 on the videotape responses indicated neutral feelings by the three-year-old group toward the two test instruments. The

possible scores ranged from 1.0 to 5.0. A score of 5 represented a positive reaction and a score of 1 represented a negative reaction. N represents total responses.

Table 2

Attitudes of Four-Year-Old Boys and Girls  
in Their Responses to Slides vs. Videotape

Slides	Videotape
<u>N</u> = 60	<u>N</u> = 60
<u>X</u> = 3.40	<u>X</u> = 3.50
<u>SD</u> = 1.25	<u>SD</u> = 1.33
<u>t</u> ratio = 0.42 <u>df</u> = 118.00   NS	

A t ratio of 0.42 for the four-year-old boys and girls,  $p > .05$  (see Table 2) indicated that no statistically significant differences existed between the four-year-old children's attitudes toward the two test instruments. A mean score of 3.40 on the slide responses and 3.50 on the videotape responses indicated neutral feelings by the four-year-old group toward the two test instruments.

Hypothesis 2 - There will be no significant difference in the reactions of the children and the three handicapping conditions on the two instrument forms.

The testing of this hypothesis involved six comparisons: (a) attitudes of the three-year-olds toward a mentally retarded child as rated on slides and videotape; (b) attitudes of the three-year-olds toward a crippled child in

a wheel chair as rated on slides and videotape; (c) attitudes of the three-year-olds toward a child with cerebral palsy as rated on slides and videotape; (d) attitudes of the four-year-olds toward a mentally retarded child as rated on slides and videotape; (e) attitudes of the four-year-olds toward a crippled child in a wheel chair as rated on slides and videotape; and (f) attitudes of the four-year-olds toward a child with cerebral palsy as rated on slides and videotape. N represents total responses.

Table 3

Attitudes of Three-Year-Olds Toward  
Mental Retardation as Rated on  
Slides and Videotape

Slides	Videotape
<u>N</u> = 16	<u>N</u> = 16
<u>X</u> = 3.25	<u>X</u> = 3.00
<u>SD</u> = 1.18	<u>SD</u> = 1.71
<u>t</u> ratio = 0.48 <u>df</u> = 30.00    NS	

A t ratio of 0.48,  $p > .05$  (see Table 3), indicated that no statistically significant difference existed between the three-year-old children's attitudes toward mental retardation as rated on the two test instruments. Mean scores of 3.25 on the slides and 3.00 on the videotape indicated a sense of neutrality toward the two test instruments. N represents total responses.

Table 4

Attitudes of Three-Year-Olds Toward  
a Crippled Child in a Wheel Chair  
as Rated on Slides and Videotape

Slides	Videotape
$N = 16$	$N = 16$
$\bar{X} = 3.00$	$\bar{X} = 2.75$
$SD = 1.54$	$SD = 1.61$
$t \text{ ratio} = 0.44 \quad df = 30.00 \quad NS$	

A  $t$  ratio of 0.44,  $p > .05$  (see Table 4), indicated that no statistically significant difference existed between the three-year-old attitudes toward a crippled child in a wheel chair as rated on the two test instruments. Mean scores of 3.00 on the slides and 2.75 on the videotape indicated a sense of neutrality toward the two test instruments.

Table 5

Attitudes of Three-Year-Olds Toward Cerebral Palsy  
as Rated on Slides and Videotape

Slides	Videotape
$N = 16$	$N = 16$
$\bar{X} = 3.62$	$\bar{X} = 3.06$
$SD = 1.20$	$SD = 1.52$
$t \text{ ratio} = 1.15 \quad df = 30.00 \quad NS$	

A  $t$  ratio of 1.15,  $p > .05$  (see Table 5), indicated that no statistically significant difference existed between the three-year-old children's attitudes toward cerebral palsy as rated on the two test instruments. Mean scores of 3.62 on the slides and 3.06 on the videotape indicated somewhat of a sense of neutrality toward the two test instruments.

Table 6

Attitudes of Four-Year-Olds Toward  
Mental Retardation as Rated on  
Slides and Videotape

Slides	Videotape
$N = 20$	$N = 20$
$\bar{X} = 3.35$	$\bar{X} = 3.35$
$SD = 1.13$	$SD = 1.38$
$t$ ratio = 0.00 $df = 38.00$ NS	

A  $t$  ratio of 0.00,  $p > .05$  (see Table 6), indicated that no statistical significance of difference existed between the four-year-old attitudes toward mental retardation as rated on the two test instruments. Mean scores of 3.25 on the slides and 3.35 on the video indicated equal sense of neutrality toward the two test instruments.  $N$  represents total responses.

Table 7

Attitudes of Four-Year-Olds Toward  
a Crippled Child in a Wheel Chair  
as Rated on Slides and Videotape

Slides	Videotape
$\underline{N} = 20$	$\underline{N} = 20$
$\bar{X} = 3.55$	$\bar{X} = 3.65$
$\underline{SD} = 1.39$	$\underline{SD} = 1.22$
$t \text{ ratio} = 0.24 \quad \underline{df} = 38.00 \quad \text{NS}$	

A  $t$  ratio of 0.24,  $p > .05$  (see Table 7), indicated that no statistically significant difference existed between the four-year-old children's attitudes toward a crippled child in a wheel chair as rated on the two test instruments. Mean scores of 3.55 on the slides and 3.65 on the videotape indicated a sense of neutrality toward the two test instruments.  $\underline{N}$  represents total responses.

Table 8

Attitudes of Four-Year-Olds Toward Cerebral Palsy  
as Rated on Slides and Videotape

Slides	Videotape
$\underline{N} = 20$	$\underline{N} = 20$
$\bar{X} = 3.30$	$\bar{X} = 3.50$
$\underline{SD} = 1.26$	$\underline{SD} = 1.43$
$t \text{ ratio} = 0.46 \quad \underline{df} = 38.00 \quad \text{NS}$	

A  $t$  ratio of 0.46,  $p > .05$  (see Table 8), indicated that no statistically significant difference existed between the four-year-old children's attitudes toward cerebral palsy as rated on the two test instruments. Mean scores of 3.30 on the slides and 3.50 on the videotape indicated a sense of neutrality toward the two test instruments.

Overall, mean scores of the comparisons from Tables 3 to 8 indicated feelings of neutrality toward the three handicapping conditions of a child with mental retardation, a crippled child in a wheel chair, and a child with cerebral palsy as shown on slides and videotape. Hypothesis 2 was accepted with the conclusion that no significant difference existed in the attitudes of the three- and four-year-old groups toward any one of the handicapping conditions.

Hypothesis 3 - There will be no significant difference in the attitudes between the boys and girls in the three- and four-year-old groups in their responses to the two instruments toward the sex of the handicapped child.

The testing of this hypothesis involved four comparisons: (a) attitudes of three-year-old boys and their male responses vs. female responses toward the sex of the handicapped child as rated on the slides and videotape; (b) attitudes of three-year-old girls and their female responses vs. male responses toward the sex of the handicapped child as rated on the slides and videotape; (c) attitudes of the four-year-old boys and their male responses vs. female



responses toward the sex of the handicapped child as rated on the slides and videotape; and (d) attitudes of four-year-old girls and their female responses vs. male responses toward the sex of the handicapped child as rated on the slides and videotape.

Table 9

Attitudes of Three-Year-Old Boys and Their Male Responses vs. Their Female Responses Toward the Sex of the Handicapped Child as Rated on the Slides and Videotape

Slides	Videotape
$\underline{N} = 21$	$\underline{N} = 21$
$\bar{X} = 2.76$	$\bar{X} = 3.04$
$\underline{SD} = 1.67$	$\underline{SD} = 1.62$
$t \text{ ratio} = 0.56 \quad \underline{df} = 40.00 \quad \text{NS}$	

A  $t$  ratio of 0.56,  $p > .05$  (see Table 9), indicated that no statistically significant difference existed between the three-year-old boys' attitudes toward the sex of the handicapped child as rated on the slides and videotape. Mean scores of 2.76 on the slides and 3.04 on the videotape indicated little differences were present concerning the two test instruments in relationship to the sex of the handicapped child.  $\underline{N}$  represents total responses.

Table 10

Attitudes of Three-Year-Old Girls and Their Female  
Responses vs. Their Male Responses Toward  
the Sex of the Handicapped Child as  
Rated on the Slides and Videotape

Slides	Videotape
<u>N</u> = 27	<u>N</u> = 27
<u>X</u> = 3.44	<u>X</u> = 3.11
<u>SD</u> = 1.28	<u>SD</u> = 1.33
<u>t</u> ratio = 0.93 <u>df</u> = 52.00    NS	

A t ratio of 0.93,  $p > .05$  (see Table 10), indicated that no statistically significant difference existed between the three-year-old girls' attitudes toward the sex of the handicapped child as rated on the slides and videotape. Mean scores of 3.44 on the slides and 3.11 on the videotape indicated a sense of neutrality toward the two test instruments. N represents total responses.

Table 11

Attitudes of Four-Year-Old Boys and Their Male  
Responses vs. Their Female Responses Toward  
the Sex of the Handicapped Child as Rated  
on the Slides and Videotape

Slides	Videotape
<u>N</u> = 24	<u>N</u> = 24
<u>X</u> = 3.16	<u>X</u> = 3.33
<u>SD</u> = 1.37	<u>SD</u> = 1.12
<u>t</u> ratio = 0.45 <u>df</u> = 46.00    NS	

A t ratio of 0.45,  $p > .05$  (see Table 11), indicated that no statistically significant difference existed between the four-year-old boys' attitudes and their male responses vs. female responses toward the two test instruments. Mean scores of 3.16 on the slides and 3.33 on the videotape indicated neutrality toward the two test instruments. N represents total responses.

Table 12

Attitudes of Four-Year-Old Girls and Their Female Responses vs. Their Male Responses Toward the Sex of the Handicapped Child as Rated on the Slides and Videotape

Slides	Videotape
$N = 36$	$N = 36$
$\bar{X} = 3.30$	$\bar{X} = 3.86$
$SD = 1.36$	$SD = 1.19$
$t \text{ ratio} = 1.83 \quad df = 70.00 \quad NS$	

A  $t$  ratio of 1.83,  $p > .05$  (see Table 12), indicated that no statistically significant difference existed between the four-year-old girls' attitudes and their female responses vs. male responses toward the sex of the handicapped child as rated on the two test instruments. A mean score of 3.30 on the slides and 3.86 on the videotape indicates a more rejecting attitude toward the sex of the handicapped child among the girls who saw the slides, and a more accepting attitude toward the sex of the handicapped child among the girls who viewed the videotape.

Neutral feelings, as indicated by the overall mean scores, seemed to exist among the three- and four-year-old boys and girls regarding sex of the handicapped child. Hypothesis 3 was accepted.

Hypothesis 4 - There will be no significant difference in the attitudes between the boys and girls in the three- and four-year-old groups in their responses to the two instruments toward the age of the handicapped child.

The testing of this hypothesis involved three comparisons: (a) attitudes of three- and four-year-old boys and girls toward age of the mentally retarded child; (b) attitudes of three- and four-year-old boys and girls toward age of the crippled child in a wheel chair; and (c) attitudes of three- and four-year-old boys and girls toward age of the cerebral palsied child.

Table 13

Attitudes of Three- and Four-Year-Old Boys and Girls  
Toward Age of the Mentally Retarded Child

Slides	Videotape
$N = 32$	$N = 32$
$\bar{X} = 3.12$	$\bar{X} = 3.35$
$SD = 1.45$	$SD = 1.25$
$t$ ratio = 0.70 $df = 70.00$ NS	

A  $t$  ratio of 0.70,  $p > .05$  (see Table 13), indicated that no statistically significant difference existed between the three- and four-year-old boys and girls in their responses to the two instrument forms toward the age of the mentally retarded child as rated on the two instrument forms. A mean score of 3.12 on the slides and 3.35 on the videotape indicated neutral feelings toward the two

test instruments.

Table 14

Attitudes of Three- and Four-Year-Old Boys and Girls  
Toward Age of the Crippled Child in the Wheel Chair

Slides	Videotape
$\underline{N} = 32$	$\underline{N} = 32$
$\bar{X} = 2.87$	$\bar{X} = 3.60$
$\underline{SD} = 1.56$	$\underline{SD} = 1.29$
$\underline{t}$ ratio = 2.15 $\underline{df} = 70.00$ $\underline{p} < .05$	

A  $\underline{t}$  ratio of 2.15,  $\underline{p} < .05$  (see Table 14), indicated that significant statistical difference did exist between the attitudes of the three- and four-year-old boys and girls in their responses to the two instrument forms toward the age of the crippled child in the wheel chair as rated on the two instrument forms. A mean score of 3.12 on the slides and 3.35 on the videotape indicated slightly neutral feelings toward the two test instruments.  $\underline{N}$  represents total responses.

Table 15

Attitudes of Three- and Four-Year-Old Boys and  
Girls Toward Age of Cerebral Palsied Child

Slides	Videotape
$\underline{N} = 32$	$\underline{N} = 32$
$\bar{X} = 3.34$	$\bar{X} = 3.40$
$\underline{SD} = 1.38$	$\underline{SD} = 1.33$
$\underline{t}$ ratio = 0.17 $\underline{df} = 70.00$ NS	

A  $\underline{t}$  ratio of 0.17,  $p > .05$  (see Table 15), indicated that no statistically significant difference existed between the three- and four-year-old boys and girls in their responses to the two instrument forms toward the age of the cerebral palsied child as rated on the two instrument forms. A mean score of 3.34 on the slides and 3.40 on the videotape indicated neutral feelings toward the two test instruments. Hypothesis 4 was rejected.

## CHAPTER V

### DISCUSSIONS, CONCLUSIONS, LIMITATIONS, AND IMPLICATIONS

The purpose of this study was to develop an instrument to assess nonhandicapped preschoolers' willingness and readiness for personal interaction with children who display visible disabilities. In this study the disabilities represented were a mentally retarded child, a crippled child in a wheel chair, and a cerebral palsied child. Four hypotheses were tested to determine preschoolers' attitudes toward their handicapped peers.

The comparison between three- and four-year-old boys and girls attitudes as measured on slides and videotape revealed no differences between the two groups. Several possible factors which may have influenced the results include: (a) The egocentric nature of three- and four-year-old children creates a "me-centered" attitude in this early stage of physical and emotional growth. Preschool children display this egocentric nature in their role-play activities, in their language, and in their interaction with children as well as with adults. One will often hear a child express himself by stating, "Me be first," or "Me good, teacher." The preschool child's needs come first; they are the major concern at this age and stage. (b)



Children involved in the study previously had been exposed to slides and videotape of themselves. Slides were taken of the children throughout the year so that different events of the school year could be recalled. These slides were shown to the children on a regular basis, and parents were given an opportunity to view them during parent meetings and also at the spring art show. The children were exposed also to the videotape form of media throughout the school year. Media services, which is located on the university campus, provided videotaping services for on- and off-campus activities and used the children's facility throughout the year. One unit of study called "I Am A Very Important Person" required videotape sequences made for each child so that he or she might visually and auditorially observe himself or herself in the school setting as he or she participated in the daily schedule of activities. The sequences were usually taken during the freeplay portion of the day which was the first activity each morning. This time was selected because of the belief that freeplay provides a sense of free-choice for each child as he or she explores and identifies with the children and/or various concept teaching activities. It is the investigator's opinion that familiarity with slide and videotape presentations, the "me-centered" nature of preschoolers, and the lack of attention to movement as shown on the videotape

resulted in the children's not showing partiality toward either type of presentation.

No significant differences were shown in the reactions of the three- and four-year-old boys and girls toward the three handicapping conditions of a child with mental retardation, a crippled child in a wheel chair, and a child with cerebral palsy as tested by slides and videotape. Possible reasons why this might occur are: (a) Children are "me-centered" at this stage of development and may be too involved in themselves to observe children different from themselves. Young children are visually centered and need the tactile stimuli in order to perceive differences; Montessori (1949) and Piaget (1924) stated that children need tactile awareness in order to better understand and explore their immediate and future experiences which lead toward cognitive growth. Various research studies (Hartup, et al., 1978; Rapier, et al., 1972), regarding the awareness of differences of others, stated that children do not become visually aware of physical differences until after age 7 or 8 and give the reasoning as a decentralization of the child's personality from an egocentric to a more peer-related nature. (b) The school curriculum of the children involved in this study emphasized the importance of each child and stressed throughout the school year the goal of developing a positive self-image. During the unit of

instruction (concerning likenesses and differences of people) at the preschool program where students in the study were enrolled, emphasis was given to the concept that everyone is special just for being himself or herself. The concept was instilled through the use of filmstrips, stories, puppetry, songs, and other experiences where the children were allowed and encouraged to verbally express their views. Children generally expressed concern and empathy toward the children represented by the three handicaps in the study, by commenting that they were sorry the crippled child couldn't walk. One child asked, "Does she got no bones?", and then questioned why the child had to be supported by straps when she was sitting in the wheel chair. (c) It is the school's philosophy to incorporate handicapped preschool children into the program. The children in the four-year-old classroom had a deaf child as one of their classmates. Most of these children became well acquainted with this child, and the teachers tried to help her become a "natural" part of the class. Emphasis was placed on helping the other children to become aware of her handicap. Her mother and the investigator worked together and presented a unit on the deaf child. The children were able to put on the hearing aid and listen to the sounds it made and were encouraged to ask questions. The child's mother demonstrated sign language and explained how her child read

lips, all of which was most exciting to the children. Concern was shown by the preschoolers toward the disabled student, but differences between the disabled students were unnoticed by the preschoolers.

No significant differences were shown in the attitudes between the three- and four-year-old boys and girls in their responses toward the sex of the handicapped child when viewed on slides and videotape. A possible reason for this occurrence is the non-sexist attitude expressed at this age. Children of this age are involved in both parallel and cooperative types of play where they play side by side as well as with one another, but they do not seem to prefer to play with just either males or females. They tend to play with any child who might be around the area where they are involved. During dramatic play, the child tends to portray the gender role which best interprets the chosen characterization.

When the videotape was shown of the handicapped children, one of the girls commented about the sex of the child by stating, "I like her; she's cute." The first comment was about the mentally retarded female child. The other child made comments regarding the children in the wheel chair: "Does he got no bones?" and "Why she got straps on her? She could fall?". Both of these responses were comments from four-year-olds. The comments seem to support

the non-sexist attitude as expressed by the three- and four-year-olds.

Concerning the hypothesis regarding attitudes between three- and four-year-old boys and girls in their responses toward the age of the handicapped child when viewed on slides and videotape, significant differences were shown in reference to the crippled children in wheel chairs. A possible reason why this occurred was the types of wheel chairs used. The tall, straight-backed wheel chairs were used as a supportive means for the children shown in the videotape and may have influenced the attitudes of the pre-schoolers. The crippled children's wheel chairs for the slide portion of the study were regular size. The male child was Oriental, and this may also have been a factor. Reactions of the children to the handicapping conditions of mental retardation and cerebral palsy were neutral, which may have been partially due to their inability at this age to visually perceive any differences from themselves. No significant differences were shown between the children's attitudes in regard to the handicapping conditions of mental retardation and cerebral palsy, but attitudes toward the handicapping condition of a crippled child in a wheel chair were a negative reaction. Three- and four-year-old boys and girls expressed positive attitudes and acceptance of the handicapped children, but they did

not prefer the mentally retarded child over the cerebral palsied child or vice versa. Factors contributing to the significant differences concerning the crippled child in a wheel chair were discussed previously.

### Conclusions

The following conclusions appear to be warranted with respect to preschoolers' attitudes toward their handicapped peers:

1. Preschool children who are exposed to various kinds of media such as slides and videotape show no partiality to either of the testing instruments.

2. Children appear to be egocentric in nature; therefore, they do not pay particular attention to visible handicaps of their age peers.

3. Young children seem to need additional stimuli other than visual means in order to help them "recognize" handicaps.

4. Three- and four-year-old boys and girls relate to positiveness and acceptance, and this was evident in their responses to the slides and videotape.

5. Four-year-old preschool boys and girls had a more positive attitude toward the handicapped child in the wheel chair than did three-year-old children.

6. Three-year-old preschool boys and girls had a more negative attitude toward the handicapped child in the wheel chair than did four-year-old children.

7. The need for maturity necessary for a child in becoming decentralized is evident for the child to be aware of differences.

8. Preschool children do not respond solely to an issue on the basis of gender and seem to have a non-sexist approach toward their peers.

9. Female children tend to express their attitudes more verbally than do males in response to empathic feelings.

10. The use of supportive devices such as wheel chairs calls more attention to a child's handicapping condition.

11. Preschool children respond in the average range of behavior by expressing neutral feelings regarding the handicapped child.

### Limitations

The following limitations are imposed upon this study:

1. The number of students participating in the study was limited to thirty-six. The limited number was necessary so that the study could be done in the university nursery school.

2. The availability of literature relating to pre-school attitudes in relationship to their handicapped peers is extremely limited.

3. The number of students used in the study was limited due to availability and restrictions regarding handicapped children, as well as the age and maturity of children.

4. Lack of knowledge of preschool children's limited perceptual skills at this age level required the investigator's speculation.

5. The study was limited in two ways: (a) it was a strictly visual presentation, and (b) it did not involve the use of auditory facilities.

### Implications

Research studies to determine the attitudes of non-handicapped preschoolers toward handicapped preschoolers are limited. A need exists for more research in this area in order to determine at what age differences in affective and cognitive functioning concerning attitude development seem to occur. Negative feelings seem to be present concerning the handicapped person, and this is too often based on societal misconceptions of inferiority and a lack of ability. In literature regarding handicapped children, it is not unusual to find articles outlining misconceptions



and negative feelings regarding society's attitudes toward disabled individuals.

One implies from this study that the preschoolers showed no awareness of developmental differences in their attitudes toward the handicapped, implying that attention is given to differences and is learned or occurs at an older age. This is an area which invites, indeed demands, research in utilizing both three- and four-year-olds in the manner that this study was structured, as well as with older age levels. The screening technique in this study offers several avenues for additional research.

Future research concern this topic of study could be done with a larger group of subjects as well as with different age groups. A validity study to analyze how the responses on this instrument compare to how children normally interact with handicapped children under normal day-to-day classroom experiences would also be informative. Studies involving the use of auditory accompaniment with the slide and videotape portion of this study could prove insightful.

## APPENDICES

APPENDIX A

BOYS' AND GIRLS' RESPONSES TOWARD HANDICAPPED  
CHILDREN AS RATED ON SLIDES

AND

BOYS' AND GIRLS' RESPONSES TOWARD HANDICAPPED  
CHILDREN AS RATED ON VIDEOTAPE

Table 16

Boys' and Girls' Responses Toward Handicapped  
Children as Rated on Slides

Type of Handicap	Three-Year-Olds																	
Mentally Retarded	2	3	4	4	1	4	5	4	4	5	2	3	2	3	2	4		
Crippled Child in WC	3	1	5	5	5	3	4	4	3	1	1	1	5	2	3	2		
Cerebral Palsy	2	4	3	2	4	5	3	4	3	5	2	5	4	5	5	2		

Type of Handicap	Four-Year-Olds																	
Mentally Retarded	5	5	3	3	5	4	1	2	3	4	4	4	4	3	2	2	4	4
Crippled Child in WC	4	5	2	4	4	4	5	3	5	2	5	5	5	1	2	2	2	2
Cerebral Palsy	2	4	2	4	2	5	5	4	2	5	4	5	2	4	2	2	2	4

Code for responses:

	Value
Great . . . . .	5
Pretty Good . . . . .	4
So-So . . . . .	3
Pretty Bad . . . . .	2
Really Bad . . . . .	1

Table 17

Boys' and Girls' Responses Toward Handicapped  
Children as Rated on Videotape

Type of Handicap		Three-Year-Olds															
Mentally Retarded		5	5	4	5	1	1	1	1	4	3	4	1	1	3	5	4
Crippled Child in WC		5	5	1	2	1	1	1	1	3	3	5	2	4	2	5	3
Cerebral Palsy		5	5	1	3	1	3	3	1	3	5	4	3	5	4	2	1

Type of Handicap		Four-Year-Olds																			
Mentally Retarded		5	3	5	3	1	5	3	4	5	4	2	3	3	5	2	5	2	1	2	4
Crippled Child in WC		1	2	5	4	3	3	5	4	4	3	5	1	4	5	5	4	4	4	3	4
Cerebral Palsy		4	5	5	4	2	4	3	4	2	1	5	4	1	4	3	5	3	5	1	5

Code for responses:

	Value
Great . . . . .	5
Pretty Good . . . . .	4
So-So . . . . .	3
Pretty Bad . . . . .	2
Really Bad . . . . .	1

APPENDIX B  
HUMAN RESEARCH CONSENT FORM

TEXAS WOMAN'S UNIVERSITY  
Box 23717 TWU Station  
Denton, Texas 76204

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HUMAN SUBJECTS REVIEW COMMITTEE

Name of Investigator: Pamela Sue Davis Center: Denton  
Address: Henderson Atate University - Box 2252 Date: January 19, 1980  
Arkadelphia, Arkansas 71923

Dear Pamela Sue Davis

Your study entitled A Comparative Study of the Attitudes of  
Nonhandicapped Preschoolers Toward Their Handicapped Peers

has been reviewed by a committee of the Human Subjects Review Committee and it appears to meet our requirements in regard to protection of the individual's rights.

Please be reminded that both the University and the Department of Health, Education, and Welfare regulations typically require that signatures indicating informed consent be obtained from all human subjects in your studies. These are to be filed with the Human Subjects Review Committee. Any exception to this requirement is noted below. Furthermore, according to DHEW regulations, another review by the Committee is required if your project changes.

Any special provisions pertaining to your study are noted below:

       Add to informed consent form: No medical service or compensation is provided to subjects by the University as a result of injury from participation in research.

       Add to informed consent form: I UNDERSTAND THAT THE RETURN OF MY QUESTIONNAIRE CONSTITUTES MY INFORMED CONSENT TO ACT AS A SUBJECT IN THIS RESEARCH.

       The filing of signatures of subjects with the Human Subjects Review Committee is not required.

       Other:

  x   No special provisions apply.

cc: Graduate School  
Project Director  
Director of School or  
Chairman of Department

Sincerely,

*Marilyn Hinson*

Chairman, Human Subjects  
Review Committee

at Denton

APPENDIX C

PARENT LETTER AND PERMISSION FORM



December 4, 1980

Dear Parents,

I am studying the attitudes of nonhandicapped pre-schoolers toward their handicapped peers and would like to work with the children at the Henderson State University Child Service Center to complete the study. I feel this information will prove to be enlightening for both parents and teachers. Most of the research regarding the handicapped child has been done with older children and I feel it will be beneficial to obtain information regarding children's attitudes during the preschool years. This study is for my dissertation which I am presently working on at Texas Woman's University in Denton, Texas.

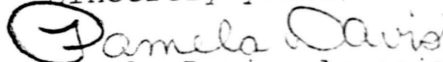
I will be working with each child in both the three- and four-year-old groups and will be administering either slides or video sequences for them to view concerning the handicapped preschool children. The slides and video tapes will involve the following types of handicaps: cerebral palsy, motor impairment (wheel chair), and mental retardation (Down's Syndrome). The children will be chosen randomly and will be assigned to participate in viewing the slides or the video tape. There will be no sound for either the slides or the video, but I will describe the children. After viewing the slides or video, the children will be shown schematic faces which portray a great face, a pretty good face, a so-so face, a pretty bad face, and a

really bad face. They will be asked to point to each face that represents one of those particular emotions. A pilot study will be administered previous to this in order that they can become more familiar with the schematic faces.

I will need to administer this test during the end of the month of January and the testing will only last approximately 10 to 15 minutes per child. The children's names will not be used, instead, a number will be assigned, so that the children will remain anonymous. This test is not stressful and there is no risk involved to the child. Since there is no chance for physical harm or injury, no medical service or compensation is provided to subjects by Texas Woman's University as a result of any injury from participation in the study.

If you are willing to allow your child to participate in this study, please complete the attached form and return to me. Please feel free to call me for additional information if you feel this is needed. I will be glad to share with you any of the materials which I will be using and I will be providing you with a compiled list of the results if you desire. Thank you for your cooperation in this matter. My office telephone number is (501) 246-5511 Extension 309, and my home telephone number is (501) 246-8727.

Sincerely yours,

A handwritten signature in cursive script that reads "Pamela Davis". The signature is written in dark ink and is positioned above the typed name.

Pamela Davis, Associate Professor  
Early Childhood Education

## Permission Form

Child's Name \_\_\_\_\_ Child's Age \_\_\_\_\_

I hereby authorize Pamela Davis of Henderson State University to study my child's attitudes regarding the handicapped preschool child. I understand that the activities involved are not stressful in any manner. I am also aware that there is no risk involved to my child and that all information will remain confidential. I understand that no medical service or compensation is provided to the subjects by Texas Woman's University as a result of injury from participation in this research.

An offer has been made to answer any questions which I might desire to ask, and I have the right to withdraw my child from the study at any time. The benefits to my child are limited to whatever increased knowledge he/she gains in the experience.

\_\_\_\_\_  
Parent's Signature\_\_\_\_\_  
Date

APPENDIX D

HUMAN SUBJECTS REVIEW COMMITTEE

RECEIPT OF INFORMED CONSENT

TEXAS WOMAN'S UNIVERSITY

Box 23717, TWU Station

Denton, Texas 76204

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HUMAN SUBJECTS REVIEW COMMITTEE

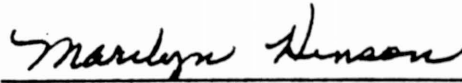
January 28, 1981

Date

TO: Project Director

Director of School or  
Chairman of Department

This is to inform you that, as of this date, Pamela Sue Davis has placed on file with the Human Subjects Review Committee the signatures of the subjects who participated in his/her research. The signatures constitute evidence of informed consent of each subject.



Chairman, Human Subjects Review  
Committee

cc: Investigator  
Graduate School

APPENDIX E

VALIDATION OF STUDY LETTER

# Henderson State University

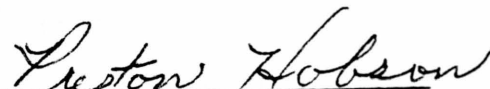
Arkadelphia, Arkansas 71923

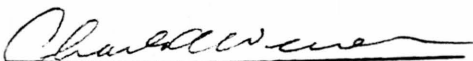
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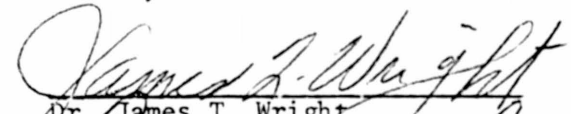
September 1, 1980

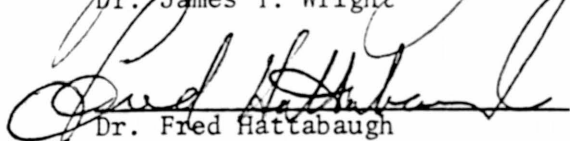
I, Pamela Sue Davis, have contacted the following Henderson State University Professors: Dr. Tommy Pace, Associate Professor and Chairperson of Special Education; Dr. Preston Hobson, Professor of Elementary Education; Dr. Charles Weiner, Professor of Secondary Education, Psychologist and Statistical Consultant; Dr. James T. Wright, Professor and Chairperson of Elementary Education and Early Childhood Education; Dr. Fred Hattabaugh, Professor and Administrative Dean of the School of Education; and Dr. Bettye Caldwell, Distinguished Donaghey Professor of Early Childhood Education at the University of Arkansas at Little Rock; for the purpose of reviewing my statistical design and the data collection procedure. Several hours were spent with each person discussing the data collection process and the instrument to be used. Each was in agreement that the procedures were judged to be valid for the purpose of this study.

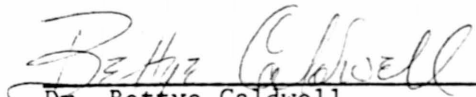
  
Dr. Tommy Pace

  
Dr. Preston Hobson

  
Dr. Charles Weiner

  
Dr. James T. Wright

  
Dr. Fred Hattabaugh

  
Dr. Bettye Caldwell

## REFERENCES

- Abeson, A., Burgdark, R. L., Casey, P. J., Kunz, J. W., & McNeil, W. Access to opportunity. In N. Hobbs (Ed.), Issues in the classification of children (Vol. II). San Francisco: Jossey-Bass, 1975.
- Abeson, A. Education for handicapped children in the least restrictive environment. In M. Kindred, J. Cohen, D. Penrod, & T. Sheffer (Eds.), The mentally retarded citizen and the law. New York: The Free Press, 1976.
- Allen, E. K. The model preschool and the behavior modification model. Paper presented at the 50th Annual International Convention of the Council for Exceptional Children, Seattle, Washington, March 23, 1972.
- Bates, P., West, T. L., & Schmerl, R. B. Mainstreaming: Problems, potentials, and perspectives. Minnesota: National Support Systems Project, 1977.
- Beeler, A. Integrating exceptional children in preschool classrooms. BAEYC Reports, 1973, XV(2), 33-41.
- Billings, H. K. An exploratory study of the attitude of handicapped children toward crippled children in three selected elementary schools. Journal of Experimental Education 1963, 31, 381-387.
- Bricker, D. D. A rationale for the integration of handicapped and nonhandicapped preschool children. In M. J. Guralnick (Ed.), Early intervention and the integration of handicapped and nonhandicapped children. Baltimore: University Park Press, 1978.
- Bronfenbrenner, U. Is early intervention effective? In B. Friedlander, G. M. Sterritt, & G. E. Kirk (Eds.), Exceptional infant, Vol. 3: Assessment and intervention. New York: Brunner/Mazel, 1975.
- Brown, L., Branston, M. B., Hamre-Niltupski, S., Johnson, F., Wilcox, B., & Grunewald, L. A rationale for comprehensive longitudinal interactions between severely handicapped students and other citizens. AAESPH Review, 1979, 4, 3-14.



- Burke, J. Children with visual disabilities. In R. Reger (Ed.), Preschool programming of children with disabilities. Springfield, Ill.: Charles C. Thomas, Publishers, 1970.
- Burton, T. A., & Hirshoren, A. Some further thoughts and clarification on the education of severely and profoundly retarded children. Exceptional Children, 1979, 45, 618-625.
- Calvert, D. R. Dimensions of family involvement in early childhood education. Exceptional Children, 1971, 37, 655-659.
- Christopherson, J. The special child in the "regular" preschool: Some administrative notes. Childhood Education, 1972, 49(3), 138-140.
- Cohen, S. Integrating children with handicaps into early childhood education programs. Children Today, Jan./Feb. 1975, 1(1), 15-17.
- Cohen, S. Fostering positive attitudes toward the handicapped: A new curriculum. Children Today, Nov./Dec. 1977, 6, 7-12.
- Cooke, T. P., Apolloni, T., & Cooke, S. A. Normal preschool children as behavioral models for retarded peers. Exceptional Children, May 1977, 43, 531-532.
- Devoney, C., Guralnick, M. J., & Rubin, H. Integrating handicapped and nonhandicapped preschool children: Effects on social play. Childhood Education, 1974, 50(6), 360-364.
- Dickerson, M. G., & Davis, M. D. Implications of P. L. 94-142 for developmental early childhood teacher education programs. Young Children, January 1979, 34(1), 28-31.
- Donaldson, J. Changing attitudes toward handicapped persons: A review and analysis of research. Exceptional Children, April 1980, 46(7), 504-514.
- Dunlop, K. H. Mainstreaming: Valuing diversity in children. Young Children, May 1977, 32, 29-32.
- Dunn, L. M. Special education for the mildly retarded -- Is much of it justifiable? Exceptional Children, 1968, 35(1), 5-22.

- Elser, R. P. The social position of hearing handicapped children in the regular grades. Exceptional Children, 1959, 25, 305-309.
- Filler, J. W., et al. Mental retardation. In N. Hobbs (Ed.), Issues in the classification of children (Vol. 1). San Francisco: Jossey-Bass, 1975.
- Guralnick, M. J. The value of integrating handicapped and nonhandicapped preschool children. American Journal of Orthopsychiatry, 1976, 42, 236-245.
- Hartup, W. W. Peer interaction and the processes of socialization. In M. J. Guralnick (Ed.), Early intervention and the integration of handicapped and nonhandicapped children. Baltimore: University Park Press, 1978.
- Haughton, D. D. Project PREM: Final report for year 1. Austin, Texas: University of Texas, 1976.
- Haywood, C. H. Labeling: Efficacy, evils, and caveats. Paper presented at "Choices on Our Conscience," an international symposium on human rights, retardation and research, sponsored by the Joseph P. Kennedy, Jr. Foundation, Washington, D.C., October 16, 1971.
- Howard, A. E. Viewpoint. Putting Humpty Dumpty together again? Mainstreaming in early childhood. Young Children, November 1977, 33(1), 14-15.
- Jones, R. L., Lavine, K., & Shell, J. Blind children integrate in classrooms with sighted children: A sociometric study. The New Outlook for the Blind, 1972, 66(3), 75-80.
- Jones, R. L., & Sisk, D. A. Early perceptions of orthopedic disability. Exceptional Children, 1967, 34, 42-43.
- Justman, J., & Maskowitz, L. The integrating of deaf children in regular classrooms. Exceptional Children, 1967, 34, 42-43.
- Kennedy, P., & Bruininks, R. H. Social status of hearing impaired children in regular classrooms. Exceptional Children, 1974, 40(5), 305-314.
- Kirk, S. A. Early education of the mentally retarded. Urbana: University of Illinois Press, 1958.

- Klein, J. W. Mainstreaming the preschooler. Young Children, July 1975, 30(5), 317-326.
- Klein, J. W. Teaching the special child in regular classrooms. Urbana, Ill.: ERIC Clearinghouse on Early Childhood Education, 1977.
- Levitt, E., & Cohen, S. Attitudes of children toward their handicapped peers. Childhood Education, January 1976; 52(3), 171-173.
- Lowenthal, B. What parents can do to help their special preschoolers. Academic Therapy, Winter 1974-75, 10(2), 181-185.
- Luterman, D., & Luterman, C. On integrating deaf children into a hearing nursery. BAEYC Reports, February 1974, 43-46.
- Macmillan, D. L. Special education for the mildly retarded: Servant or savant. In R. L. Jones (Ed.), Problems and issues in the education of exceptional children. Boston: Houghton Mifflin, 1971.
- Macmillan, D. L., & Semmel, M. I. Mental retardation in school and society. Boston: Little, Brown & Co., 1977.
- McLaughlin, J. A., & Kershman, S. M. Mainstreaming in early childhood: Strategies and resources. Young Children, May 1979, 34(4), 53-66.
- Meisels, S. J. First steps in mainstreaming: Some questions and answers. Young Children, November 1977, 33(1), 4-13.
- Montessori, M. Childhood education. Chicago: Henry Regnery Company, 1949.
- Peterson, C., Peterson, J., & Scriven, G. Peer imitation by nonhandicapped preschoolers. Exceptional Children, 1977, 43, 223-224.
- Peterson, N. L., & Haralick, J. G. Integration of handicapped and nonhandicapped preschoolers: An analysis of play behavior and social interaction. Education and Training of the Mentally Retarded, 1977, 12, 235-245.

- Piaget, J. Judgment and reasoning in the child. Translated by M. Worden. New York: Harcourt, Brace & World, Inc., 1928. (Original French edition, 1924)
- Pollack, D., & Ernst, M. Learning to listen in an integrated preschool. Volta Review, 1973, 75(6), 359-367.
- Porter, R. H., Ramsey, B., Tremblay, A., Iaccobs, M., & Crawley, S. Social interactions in heterogeneous groups of retarded and normally developing children: An observational study. In G. P. Sackett (Ed.), Application of observational/ethological methods to the study of mental retardation (Vol. 1). Baltimore: University Park Press, 1978.
- Rapier, J., Adelson, R., Carey, R., & Croke, K. Changes in children's attitudes toward the physically handicapped. Exceptional Children, 1972, 39, 219-223.
- Ray, J. S. Behavior of developmentally delayed and non-delayed toddler-age children: An ethological study. Unpublished doctoral dissertation, George Peabody College, 1974.
- Reynolds, M. C. (Ed.). Mainstreaming: Origins and implications. Reston, Va.: Council for Exceptional Children, 1976.
- Snyder, L. K., Appolloni, T., & Cooke, T. P. Integrated settings at the early childhood level: The role of nonretarded peers. Exceptional Children, Fall 1977, 43, 262-266.
- Sontag, E., Certo, N., & Button, J. E. On a distinction between the education of the severely and profoundly handicapped and a doctrine of limitations. Exceptional Children, 1979, 45, 604-616.
- Spollen, J., & Ballif, B. L. Effectiveness of individualized instruction for kindergarten children with developmental lag. Exceptional Children, 1971, 38(3), 205-209.
- Stephens, T. M., & Braun, B. L. Measures of regular classroom teachers' attitudes toward handicapped children. Exceptional Children, January 1980, 46(4), 292-294.
- Swap, S. Integrating children with special needs into regular preschool classes: Some guidelines for assessment. BAEYC Reports, 1974, 15(4), 115-124.

- Tait, P. E. Believing without seeing: Teaching the blind child in a "regular" kindergarten. Childhood Education, 1974, 50(5), 285-291.
- Thurman, S. K., & Lewis, M. Children's response to differences: Some possible implications for mainstreaming. Exceptional Children, March 1979, 45, 468-470.
- Yule, S. Kindergarten for children with handicaps. Australian Preschool Quarterly, 1963, 4(2), 4-7.