Affective development training and disability simulation with sighted children and its effects on interaction strain and attitudes toward visually handicapped peers

Christopher Raymond Ovide
*College of William & Mary - School of Education*

Follow this and additional works at: [https://scholarworks.wm.edu/etd](https://scholarworks.wm.edu/etd)

Part of the [Student Counseling and Personnel Services Commons](https://scholarworks.wm.edu/etd)

**Recommended Citation**

[https://dx.doi.org/doi:10.25774/w4-fy5x-5366](https://dx.doi.org/doi:10.25774/w4-fy5x-5366)
INFORMATION TO USERS

This material was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or “target” for pages apparently lacking from the document photographed is “Missing Page(s)”. If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.

2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.

3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in “sectioning” the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.

4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from “photographs” if essential to the understanding of the dissertation. Silver prints of “photographs” may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.

5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

Xerox University Microfilms
300 North Zeeb Road
Ann Arbor, Michigan 48105
OVIDE, CHRISTOPHER RAYMOND
AFFECTIVE DEVELOPMENT TRAINING AND DISABILITY SIMULATION WITH SIGHTED CHILDREN AND ITS EFFECTS ON INTERACTION STRAIN AND ATTITUDES TOWARD VISUALLY HANDICAPPED PEERS.

THE COLLEGE OF WILLIAM AND MARY IN VIRGINIA, ED.D., 1977
AFFECTIVE DEVELOPMENT TRAINING AND DISABILITY
SIMULATION WITH SIGHTED CHILDREN AND ITS
EFFECTS ON INTERACTION STRAIN AND
ATTITUDES TOWARD VISUALLY
HANDICAPPED PEERS

A Dissertation
Presented to the
Faculty of the School of Education
The College of William and Mary in Virginia

In Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education

by
Christopher R. Ovide
October 1977
APPROVAL SHEET

We, the undersigned, do certify that we have read this dissertation and that in our individual opinions it is acceptable in both scope and quality as a dissertation for the degree of Doctor of Education.

Kevin E. Geoffrey, Ed.D.
Chairman, Doctoral Committee

Robert B. Bloom, Ph.D.

Charles O. Mathews, Ph.D.
APPROVAL SHEET

We, the undersigned, do certify that we have read this dissertation and that in our individual opinions it is acceptable in both scope and quality as a dissertation for the degree of Doctor of Education.

Kevin E. Geoffroy, Ed.D.
Chairman, Doctoral Committee

Robert B. Bloom, Ph.D.

Charles O. Mathews, Ph.D.
ABSTRACT

AFFECTIVE DEVELOPMENT TRAINING AND DISABILITY SIMULATION WITH SIGHTED CHILDREN AND ITS EFFECTS ON INTERACTION STRAIN AND ATTITUDES TOWARD VISUALLY HANDICAPPED PEERS

CHRISTOPHER R. OVIDE, Ed.D.

CHAIRMAN OF THE DOCTORAL COMMITTEE
KEVIN E. GEOFFROY, Ed.D.

The purpose of this investigation was to determine the relationship between an affective development training program and disability simulation with sighted fifth-, sixth-, and seventh-graders and their attitudes toward visually handicapped peers and level of anxiety when encountering such a person. It was hypothesized that group guidance in understanding the feelings of others and the effect of one's actions on another's combined with blindness simulation would increase positive attitudes toward the disabled and reduce anxiety in the sighted child as well as in the visually handicapped child on initial encounters.

There were 18 sighted children randomly selected and assigned to one of three treatment groups; 6 participated in an 11-session group guidance program, 6 were given the same training together with a blindness simulation experience during 1 school day, and 6 were assigned to the experimental control group. After completing the training, the three sighted groups were taken to the Virginia State School for the Blind at Hampton, Virginia. Each group then participated separately with a comparable number of visually handicapped peers in accomplishing a group task.

Immediately following the joint task, each of the three groups of sighted children and three groups of handicapped children were tested for anxiety and attitudes toward the blind and physically handicapped. Anxiety was measured by the Spielberger Anxiety State Scale of the State Trait Anxiety Inventory for Children. A modified form of the Friedman Attitudes toward Disabled Persons--Revised for Children was used to assess the sighted children's attitudes toward their visually handicapped peers.

A positive trend toward more favorable attitudes toward the disabled was detected for those children who had had the affective development training. A trend toward lower levels of anxiety in the visually handicapped subjects interacting with the sighted children who had had the affective development training was also found. Anxiety in the sighted children did not appear to have been affected. The simulation of blindness did not result in appreciable gains in more positive attitudes toward the handicapped, however, its individual contribution could not be assessed.
Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>ix</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>x</td>
</tr>
<tr>
<td>CHAPTER</td>
<td></td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>2</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>3</td>
</tr>
<tr>
<td>Experiment, Sample, and Data Collecting</td>
<td></td>
</tr>
<tr>
<td>Procedures</td>
<td>5</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>6</td>
</tr>
<tr>
<td>Hypothesis 1</td>
<td>6</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>6</td>
</tr>
<tr>
<td>Hypothesis 3</td>
<td>6</td>
</tr>
<tr>
<td>Hypothesis 4</td>
<td>6</td>
</tr>
<tr>
<td>Hypothesis 5</td>
<td>7</td>
</tr>
<tr>
<td>Hypothesis 6</td>
<td>7</td>
</tr>
<tr>
<td>Hypothesis 7</td>
<td>7</td>
</tr>
<tr>
<td>Hypothesis 8</td>
<td>7</td>
</tr>
<tr>
<td>Hypothesis 9</td>
<td>7</td>
</tr>
<tr>
<td>Theoretical Rationale</td>
<td>8</td>
</tr>
<tr>
<td>Limitations of the Study</td>
<td>8</td>
</tr>
<tr>
<td>Definitions</td>
<td>9</td>
</tr>
<tr>
<td>Anxiety</td>
<td>9</td>
</tr>
<tr>
<td>Visually Handicapped</td>
<td>9</td>
</tr>
</tbody>
</table>

iii
2. REVIEW OF THE LITERATURE ................................................................. 10
   Theory ........................................................................................................ 10
   Research ..................................................................................................... 14
   Attitudes toward the Blind and Disabled .................................................. 14
   Attitudes toward the Disabled School Child and His Acceptance by Nondisabled Peers .......................................................... 19
   Sociometric Evaluations of the Status and Acceptability of Blind and Disabled Children .......................................................... 21
   Interaction Strain and Anxiety between Disabled and Nondisabled Persons .......... 26
   Peer Attitudes toward Disabled Child ...................................................... 28
   Programs for Change of Attitude toward the Handicapped ......................... 30
   Summary .................................................................................................. 35

3. METHODOLOGY .................................................................................. 37
   Subjects .................................................................................................... 37
   Selection and Assignment of Subjects ...................................................... 38
   Procedures ............................................................................................... 38
   Group Guidance Program ..................................................................... 41
   Group Leaders ......................................................................................... 42
   Instruments .............................................................................................. 43
   Empathetic Perception Inventory ......................................................... 43
   State Trait Anxiety Inventory for Children .......................................... 43
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes toward Disabled Persons—</td>
<td></td>
</tr>
<tr>
<td>Revised for Children</td>
<td>46</td>
</tr>
<tr>
<td>Experimental Design</td>
<td>47</td>
</tr>
<tr>
<td>Statistical Analysis</td>
<td>47</td>
</tr>
<tr>
<td>Hypothesis 1</td>
<td>49</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>49</td>
</tr>
<tr>
<td>Hypothesis 3</td>
<td>49</td>
</tr>
<tr>
<td>Hypothesis 4</td>
<td>49</td>
</tr>
<tr>
<td>Hypothesis 5</td>
<td>49</td>
</tr>
<tr>
<td>Hypothesis 6</td>
<td>50</td>
</tr>
<tr>
<td>Hypothesis 7</td>
<td>50</td>
</tr>
<tr>
<td>Hypothesis 8</td>
<td>50</td>
</tr>
<tr>
<td>Hypothesis 9</td>
<td>50</td>
</tr>
<tr>
<td>4. RESULTS</td>
<td>51</td>
</tr>
<tr>
<td>Hypothesis 1</td>
<td>51</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>55</td>
</tr>
<tr>
<td>Hypothesis 3</td>
<td>55</td>
</tr>
<tr>
<td>Hypothesis 4</td>
<td>60</td>
</tr>
<tr>
<td>Hypothesis 5</td>
<td>60</td>
</tr>
<tr>
<td>Hypothesis 6</td>
<td>61</td>
</tr>
<tr>
<td>Hypothesis 7</td>
<td>61</td>
</tr>
<tr>
<td>Hypothesis 8</td>
<td>62</td>
</tr>
<tr>
<td>Hypothesis 9</td>
<td>62</td>
</tr>
<tr>
<td>5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS</td>
<td>64</td>
</tr>
<tr>
<td>Summary</td>
<td>64</td>
</tr>
<tr>
<td>Findings and Interpretations</td>
<td>65</td>
</tr>
</tbody>
</table>
Acknowledgments

This dissertation would not have been possible without the assistance and cooperation of many people. To everyone who offered me help and encouragement, I am deeply grateful. In particular, I would like to give special thanks to:

Kevin Geoffroy who chaired my committee and served as my advisor and friend throughout my graduate program.

Bob Bloom for his friendship and his advice and counsel that enabled this research to be done and done right.

Charles Mathews who listened and helped when I came to him with many of the difficulties involved in conducting this research.

The faculties and staffs of Walsingham Academy, the Virginia School for the Blind, and the Educational Services Division of the Virginia Commission for the Visually Handicapped. My warmest thanks go to the kids who participated in this study.

My friends and fellow students at the college, especially Torry and Leslie.

Keith Wright, a friend who helped me through the most difficult adjustment I ever hope to make and put this whole idea in my head.

Warren Rule, my friend and mentor.

Mike Burton, my counselor and friend who was always there with the encouragement and support I needed.
And most of all, to my wife, Pam, and our two children, Brian and Becky. Without their love, presence, and, most of all, fortitude, this dissertation would not have been written.
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Orthogonal Contrasts of the Three Sighted Treatment Groups for the Empathic Perception Inventory</td>
<td>52</td>
</tr>
<tr>
<td>2.</td>
<td>One-way Analysis of Variance with Orthogonal Contrasts for the Sighted Subjects Scores on the Attitudes toward Disabled Persons</td>
<td>53</td>
</tr>
<tr>
<td>3.</td>
<td>One-way Analysis of Variance with Orthogonal Contrasts for the Sighted Subjects Scores on the State Anxiety Scale</td>
<td>56</td>
</tr>
<tr>
<td>4.</td>
<td>One-way Analysis of Variance with Orthogonal Contrasts for the Visually Handicapped Subjects Scores on the State Anxiety Scale</td>
<td>58</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Experimental Design of the Study</td>
<td>48</td>
</tr>
</tbody>
</table>
AFFECTIVE DEVELOPMENT TRAINING AND DISABILITY SIMULATION WITH SIGHTED CHILDREN AND ITS EFFECTS ON INTERACTION STRAIN AND ATTITUDES TOWARD VISUALLY HANDICAPPED PEERS
Chapter 1

Introduction

Since the 1950s, the concept of integrating the disabled child into the regular classroom has become the preferred approach in the education of exceptional children (Kirk, 1972). In The Disabled School Child, Elizabeth Anderson (1973) traces the beginnings of this movement to the realization by educators that the handicapped child would inevitably be confronted with the task of adjusting to the larger society of nondisabled persons.

Mainstreaming, or the integration of the handicapped into the ordinary classroom, has been found to have several advantages over isolation of the handicapped child in special schools.

Blind persons educated in ordinary classrooms, as opposed to those receiving their education in schools for the blind, have a better chance of finding and holding a job (Cutsforth, 1962). Kirk's (1972) review of the literature reports that handicapped children in regular schools attain significantly higher levels of achievement than those in special schools. He is supported in studies by Cassidy and Stratton (1959) and Thurstone (1959). In addition, Anderson (1973) reports that parents of disabled children in regular classes feel their children are happy and perform well.

Similarly, Carroll (1967) reports that she found the regular classroom to be significantly superior to special school instruction in fostering positive self-concept among educable mentally retarded
children. Improvements in vocational expectations, academic achievement, and self-concept for the disabled child have been related to mainstreaming.

**Statement of the Problem**

The entrance of physically handicapped children into the regular classroom increases the number of contacts a disabled child will have with nondisabled peers. It also increases the chance of a nonhandicapped child to meet and interact with children who are physically handicapped.

Mainstreaming presently involves the exceptional student in a regular classroom situation. The handicapped child has generally been prepared to function academically in this environment prior to his entrance. He or she has received special instruction and equipment to permit as close to normal participation in school activities as the handicapping condition will allow. While the handicapped child will have had the experience of interacting with the nonhandicapped population, his nondisabled counterpart will not have had a similar exposure to the handicapped. Mainstreaming, then, currently includes little or no preparation of the nonhandicapped student for his first encounter with a disabled peer.

Sociometric studies by Anderson (1973) and Jones, Lavine, and Shell (1972) have indicated that integration of the disabled child into the ordinary school system does not result, universally, in a negative self-concept by the handicapped child, nor does it mean rejection by his peers. On the contrary, these studies have found that the disabled school child is generally accepted and well-thought
of by his peers. However, Jones et al. feel that programs for educating the nonhandicapped child in the understanding of the handicapped and their needs and problems, as well as the limitations they face, and especially their essential humanness, are imperative. Although they have similar findings to Anderson, Jones and his colleagues go further than simply establishing that classmates tend to rate handicapped peers favorably. They look also at which children rate the disabled high and which children in the class see them as socially undesirable. They report that those children who are themselves rated as less desirable as friends and playmates are the children who tend to associate with and rate the handicapped children highly. They find that the more favorably rated children rank their handicapped classmates negatively or lower in desirability for social contact. Jones et al. speculate that this shows a negative attitude toward the handicapped child, and, also, that it might be damaging to the disabled child to be accepted principally by those who find it difficult to gain social entrance into the larger and perhaps more socially adjusted group.

There is, then, a need in education for a means of making the sighted child aware of the similarities, as well as the differences, between the blind child and himself. Such a method should increase the acceptability of the blind by the sighted and, thereby, substantially reduce the anxiety that generally accompanies an encounter between the handicapped and nonhandicapped. This study proposes a model which addresses itself to this problem.
Experiment, Sample, and Data Collecting

Procedures

The investigation uses a group guidance program oriented toward the child's understanding the feelings of others and how his behavior influences the behavior and feelings of others. This is combined with a blindness simulation experience with sighted children in an effort to discern whether such training and experiences will result in a lessening of anxiety between sighted and visually handicapped youngsters in an initial encounter. There will be three groups of sighted upper-elementary-school children involved. A group will have the group guidance training and a second group will receive the training while also undergoing a 1-day-long disability simulation experience in which they will be blindfolded. The third sighted group will receive no training and will not participate in the blindness simulation. All three of these groups will then be placed in a group task situation with visually impaired children and the reactions to the experience of all the children, sighted and visually impaired, will be measured.

The children involved in the study are boys and girls selected at random from the fifth-, sixth-, and seventh-grades of a parochial school in Williamsburg, Virginia. They come from middle- and upper-income families in the area. Half of the visually impaired children are students enrolled in regular classrooms in the cities of Hampton, Virginia, and Newport News, Virginia. The remaining visually impaired children are residents or day students at the Virginia School for the Blind at Hampton. The visually impaired
subjects come from lower- to middle-income families and are comparable in age and grade level to the sighted subjects.

**Hypotheses**

The hypotheses as stated in the null form are:

**Hypothesis 1**

Sighted children with the group training and blindness simulation experience (group E₁) will have no significant difference in attitude toward the disabled following the visually handicapped/sighted task group experience than the other two groups of sighted children.

**Hypothesis 2**

This same group of sighted children (group E₁) will have no significant difference in level of anxiety following the handicapped/sighted task group experience than the other two groups of sighted children.

**Hypothesis 3**

Visually handicapped children interacting with group E₁ will have no significant difference in level of anxiety than those visually handicapped children involved with the other two groups.

**Hypothesis 4**

The sighted children with only the group training (group E₂) will have no significant difference in positive attitudes toward the blind than the sighted children who received no training and did not participate in the blindness simulation.
Hypothesis 5

These same sighted children (group E₂) will have no significant difference in level of anxiety following the sighted/blind task group than the sighted subjects who received no training and did not participate in the blindness simulation.

Hypothesis 6

The visually handicapped children involved with these sighted youngsters will show no significant difference in level of anxiety than those children interacting with those sighted children without training.

Hypothesis 7

The experimental control group (group E₃) or the group of sighted children without group training or disability simulation will have no significant difference in attitude toward the blind than the sighted children in the other two groups.

Hypothesis 8

The control group (group E₃) of sighted children will have no significant difference in level of anxiety following the sighted/blind task group than the children in the other two groups.

Hypothesis 9

The visually handicapped children interacting with the sighted control group will not have higher levels of anxiety than those handicapped children involved with the other sighted experimental groups.
Theoretical Rationale

The work of Erwin Goffman (1963) is the theoretical basis for the statement that more adequate preparation of the nonhandicapped student is necessary for mainstreaming to become a more successful means of educational and psychological growth for the exceptional child. Goffman theorizes that the first encounter between a normal individual and a handicapped person results in the arousal of anxiety for both. Both have assigned the other certain social characteristics and expectations. The handicapped person is seen by the normal individual and himself as possessing some defect or failing. It is this defect which leads to an unusual anxiety and even hostility toward the disabled person in the nondisabled. This, in turn, leads to the unacceptability of the handicapped person by the normal person and to self-depreciation in the handicapped person. It can be reasoned, then, that the mere integration of the handicapped into the regular classroom or the preparation only of the handicapped student for this integration is insufficient for effective interpersonal socialization between both groups. It will be necessary to prepare the nondisabled child as well.

Limitations of the Study

The limitations imposed on generalizations from this study include the sample of children used. Not only is it small in number, but the sighted children are from an unusually homogeneous socioeconomic group, not representative of the local community. The handicapping condition studied is also a factor, as it is confined to a visual impairment.
Definitions

Anxiety

Anxiety will refer to a subjective, emotional response that includes the objective criteria of nervousness, feelings or anticipation of danger, fear, or discomfort in the subjects toward others and their surroundings.

Visually Handicapped

For the purpose of this study, "visually handicapped" will denote a child who is ophthalmologically blind (no penetration of light to the optic nerve), legally blind (distance acuity of 20/200 or less with the widest angle of vision not exceeding 20 degrees), and those unable to read print. The visually impaired or partially seeing will also be included under the definition of visually handicapped and are understood as those individuals who have corrected vision above 20/200 but not exceeding 20/70 and are able to read print.
Chapter 2
Review of the Literature

The review of the literature includes a full examination of the theoretical base used in this study, followed by investigations into attitudes toward the blind and disabled as a general group, as well as the disabled school child. Methods of effecting change in attitudes toward the visually handicapped and other disabled groups will be discussed.

Theory

In *Stigma* (1963), Goffman describes the nature and origin of attitudes toward those who are seen as physically, emotionally, racially, or religiously deviant from the observer. Goffman contends that society makes use of categories of attributes and character seen as "ordinary and natural for members of these categories [p. 2]." A person is, thus, assigned a "social identity." Such identity assignments are done unconsciously whenever one meets a stranger, allowing one to organize and accommodate oneself to persons one is familiar with. These assignments are brought into conscious thought, however, when one is brought into contact with an individual who does not meet the criteria for a category to which one would normally assign him. This person has a "failing" or a "handicap" which Goffman refers to as a "stigma." Goffman describes the handicapped individual in this way:

He is thus reduced in our minds from a whole and usual
person to a tainted, discounted one. Such an attribute is a stigma, especially when its discrediting effect is very extensive; sometimes it is also called a failing, a shortcoming, a handicap [p. 3].

It is also pointed out that not all attributes are at issue, but only those that do not conform to a stereotyptic picture the observer has formed about the characteristics the encountered stranger should possess. People who do not deviate from the expectations of the observer are called "normals."

When a person has been identified as having a stigma, a "stigma-theory" is constructed by those who encounter him. The stigma-theory is a rationed set of constructs which explain to the normal individual the subhumaness and inferiority of the deviant person. Goffman (1963) also believes it to be a rationalization for the danger the stigmatized individual represents to the normal person and explains the animosity the handicapped person may arouse in him. The stigmatized or handicapped person uses this same identity system:

His deepest feelings about what he is may be his sense of being a normal person, a human being like anyone else, a person, therefore, who deserves a fair chance and a fair break. (Actually, however phrased, he bases his claims not on what he thinks is due everyone, but only everyone of a selected social category into which he unquestionably fits, for example, anyone of his age, profession, and so forth.) Yet, he may perceive, usually quite correctly,
that whatever others profess, they do not really accept
him and are not ready to make contact with him on equal
grounds. Furthermore, the standards he has incorporated
from the wider society equip him to be intimately alive to
what others see as his failing, inevitably causing him, if
only for moments, to see that he does indeed fall short
of what he really ought to be [ p. 7 ].

Thus, the key factor to understanding the life situation of
the stigmatized person is "acceptance," the degree to which others
who interact with him identify him as belonging to the particular
category of attributes he should fit. Goffman (1963) sees
"acceptance" of the handicapped person as that level to which others
"fail to accord him the respect and regard which the uncontaminated
aspects of his social identity have led them to anticipate extending,
and have led him to anticipate receiving [ p. 9 ]." In the face of
this situation, the handicapped person can do one of three things:
try to correct his failing and thereby eliminate it, compensate for
it, or deny the reality of his situation.

The result of this formation of attributes of others and
assignment of a social identity to another is that the normal and
handicapped person will go to great lengths in avoiding contact
with each other. Due to the very nature of his failing, the
physically handicapped person is at a disadvantage in this and is
forced to exert more energy and meet with less success than his
nondisabled peers. This serves only to further reduce his self-
identity and distance him to an even greater extent from the
stereotypic ideal he wishes to identify with.

Goffman (1963) envisions the encounter between a physically handicapped or otherwise stigmatized person and a normal stranger as one of extreme discomfort and anxiety for both. The handicapped individual knows he is being assigned to one of several nonnormal categories. Even if the categorization is not unfavorable, he must wonder whether he has been stripped of his individual human identity and classified according to his handicap. The handicapped person usually receives little feedback from the larger society of nonhandicapped as to what they really think of him. Goffman further points out that even the slightest anxiety on the part of the stigmatized person in interacting with a normal will only serve to confirm for the normal individual the differences between himself and a handicapped person. Arousing uneasiness in the disabled one also. Depending on the category in which the normal participant has placed the handicapped, this uneasiness can range from mild discomfort to moderate or high levels of anxiety. This phenomena has been identified and labeled by other investigators as "interaction strain" (Jones, 1970, 1974; Jones et al., 1972; Kleck, Ono, & Hastorf, 1966). Recognizing this phenomena and its effects on integration of physically handicapped children in the regular classroom, Chigier and Chigier (1970) believe the initial and subsequent early encounters between the disabled and nondisabled school child should be positive. They report that those children who are themselves rated as less desirable as friends and playmates are the children who tend to associate with and rate the handicapped
children highly. They find that the more favorably rated children rank their handicapped classmates negatively or lower in desirability for social contact. Jones speculates that this shows a negative attitude toward the handicapped child and, also, that it might be damaging to the disabled child to be accepted principally by those who find it difficult to gain social entrance into the larger and perhaps more socially adjusted group.

Research

Attitudes toward the Blind and Disabled

In an investigation of the factors underlying attitudes toward the disabled, Jones (1974) reported that the origin of attitudes toward various disabilities was similar for all and not discrete for a specific handicap. A hierarchical factor analysis for responses to a 78-item social distance questionnaire consisting of six interpersonal situations and 13 categories of "exceptionality and non-exceptionality" was made. Subjects used in the study were students in an introductory psychology course at Ohio State University, Columbus, Ohio, 132 men and 132 women. Each subject had to match a card with one of the 12 disability categories (e.g., blind, crippled, deaf, et cetera.) to each of the six situations, e.g., I would marry this person. The person responded by indicating his attitude toward a specific group and situation by marking the appropriate level on a one (low) to seven (high) scale on the questionnaire. The results revealed four discernable attitude factors corresponding to the general categories of physically disabled,
psychologically disabled, mildly retarded/normal, and the gifted. Jones (1974) went no further than the identification of these four broad categories of response patterns of disability stereotypes, and concluded there was no significance between the various subcategories of disability within these four general areas.

Using 94 subjects to rank which of 10 people with "anomalies" or handicaps they would choose first as friends, Shears and Jensen (1969) attempted to discover the factors underlying attitudes of nondisabled persons toward those with a handicap. The subjects were all adults, undergraduate and graduate students, as well as psychiatric technicians. The participants were asked to rank the 10 disabled persons, blind person, deaf mute, mental retardate, person in wheelchair, cerebral palsied person, homosexual, mentally ill person, amputee, a severe stutterer, or a person with a hairlip, that they would wish to have as a friend, and, second, each was asked to rank the anomalous conditions they would rather be afflicted with if they were to become disabled. In addition, the subjects completed a social distance rating sheet on each of the anomalous conditions. An amputee as a friend was followed by an individual in a wheelchair, and a blind person. Of these three, 77% would choose a blind person as a friend. The individual with a hairlip and one who stuttered followed; they were selected by half the subjects as acceptable as a friend, as was the deaf mute. The cerebral palsied or spastic person was selected next by only 38%, the mentally ill person was acceptable to 28%, and the mentally retarded by 24%. Least acceptable was a homosexual, 17%. 
From the results, the authors (Shears & Jensema, 1969) theorized that there were six dimensions that interacted and combined to produce a stereotypic category of a stigmatized person:

- Visibility of affliction, interference with the communication process, social stigma associated with disability,
- Reversibility process or the degree to which the disability could be treated and eliminated, and the degree of incapacity and the difficulty the handicap imposed on the person's daily living (p. 96).

A study by Comer and Piliavin (1975), in which 34 nondisabled adults having an average age of 38.9 years, 34 adventitiously disabled subjects (disabled within 1 year of the study) with a mean age of 42.4 years, and 13 persons who had a long history of disability and having an average age of 43, found that the nondisabled tended to have more favorable attitudes toward disability than those recently disabled. The attitudes of the normal subjects toward nondisabled persons was below that of the handicapped persons they rated. Recently handicapped persons were found to have a consistently lower evaluation of persons with handicaps than those without, as based on perceived abilities and personal characteristics of persons whose photographs they were shown. Those who had a long history of disability rated normals higher than the recently handicapped or nondisabled groups and continued to rate the handicapped low, as did the recently disabled. Comer and Piliavin concluded that there is correlation between length of disability and one's attitude concerning it, and that nondisabled persons do not have negative
or unfavorable attitudes about the handicapped.

Richardson (1971) studied the relationship between children's values and their behavior concerning the physically handicapped. In a summer camp for boys in which the nondisabled and the handicapped lived together, he measured the boys' values and ideas of the handicapped and their abilities, and established a group value. He then hypothesized that those boys who had values more nearly matching the group value would choose a nonhandicapped youth as their best friend, while those who were furthest from the group value would choose a handicapped boy. For the nonhandicapped boys, the hypothesis was confirmed, but the handicapped youngsters exhibited a different picture. For the boys with less visible handicaps, the hypothesis was true after the second week of camp, but after the fourth week no relationship between group value conformity and choice of best friend was found. For the boys with the most visible handicaps, the opposite of the hypothesis was found to be true after the fourth week of camp, and at the first evaluation during the second week, there was no relationship. Richardson concluded attitudes and values concerning the handicapped did exist in children and were generally unfavorable or negative.

In their 1969 study of personal-social dimensions of disability and the relationship between the perception of disability and locus of control, MacDonald and Hall (1969) felt internals would be less accepting of emotional disability, while externals would be less accepting of visible, physical handicaps. A scale for discerning perception of disabled persons in five areas of disability,
internal (e.g., heart problems), sensory (e.g., blindness), disfigurement (e.g., a scarred face), amputations (arm or leg), emotional (e.g., having irrational fears), was developed. The subjects were graduate students in psychology at West Virginia University, Morgantown, West Virginia, who had been administered Rotter's I-E (Internal-External) inventory a month prior to the testing on personal-social dimensions of disability. The subjects were asked to rate the effect of each disability on six personal-social areas which included on the job, in the marriage, in the community, and so forth. As a reference, the subjects were asked to envision the disabled person as being a 28-year-old male, married, with two children, and having a middle-class income. Results indicated that internally controlled subjects did find emotional disorders more disturbing than physical, visible handicaps. However, there was no support for the prediction that externals would find physical handicaps more disturbing than emotional disorders. The authors also reported that perceptions and attitudes concerning disability differed significantly, depending upon the situation in which the specific disability was viewed. The sensory disorders saw a greater rating of disruption in the vocational and parental areas with the least effect being found in the marital relationship. The cosmetic areas revealed the most effected dimension to be the personal interaction area and it was the only one where the vocational dimension was rated high. The authors state that the most startling finding was that the nondisabled perceive the social interacting of disabled persons to be the
least affected by a handicapping condition, while the personal and family dimensions showed the highest perception of difficulty to be faced by the disabled.

Negative attitudes toward handicapped persons were found to be highly correlated with authoritarianism. Norman, Barry, and Davis (1970) gave a battery of nine tests to 250 female college students in order to measure their attitudes toward the disabled. Using personality tests and correlating them with the Attitudes Toward Disabled Persons Scale, Norman et al. found an inverse correlation of positive attitudes toward the disabled and authoritarianism. A second factor which had a high correlation with positive attitudes toward disability was body satisfaction; the more the nondisabled felt satisfied with his own body image, the more he accepted visible physical handicaps in others. The best predictor of attitudes toward the disabled was found to be authoritarianism, which generally indicated a negative concept of disability.

Investigations have shown, then, that there does exist a generally unfavorable pattern of attitudes toward people with handicaps. They have also shown that certain disabling conditions create for the sufferer difficulties in dealing with nondisabled persons in their daily lives.

Attitudes toward the Disabled School Child and His Acceptance by Nondisabled Peers

Attitudes toward handicapped children by their peers has
been found to closely resemble that between disabled and nondisabled adults. Working in Israel, Chigier and Chigier (1970) have proposed three sources of attitudes toward the disabled. The first was social conditioning or what was learned about disability from parents, friends, and such things as movies, books and other literature. The most important of these was what was learned from parents, who were considered to be the primary source of attitudes and values. The second source of attitudes was from exposure to people with handicaps. They maintained that the quality of the initial exposure to disabled persons and the subsequent early encounters was the most important variable. The third source of attitude establishment was seen to be the contribution of positive or negative teaching about disability and the proper attitude one should take when encountering handicapped individuals.

Working with sighted children, Barbara Bateman (1962) investigated their perceptions of blind children's abilities. The subjects were from the third- through eighth-grades and consisted of 117 who had known or attended school with visually handicapped children and 115 who had not. She used children from urban and rural school districts in the Midwest and West Coast. The participants were asked to complete a 50-item questionnaire composed of activities the author believed possible of sighted children grade three and above. The subjects were requested to indicate whether they believed a blind child was able to perform the activity. However, the author did not make known whether the sighted respondent felt he could have performed the activity which, it would
seem, would add strength to the rated results.

Bateman (1962) found that sighted children who had known blind children rated their abilities more positively than those who had not had previous contact with the blind. She also discovered that positive perception of the abilities of the blind increased with the number of blind children the sighted child had known. Though neither of these positive ratings was significant at the .01 or .05 levels, they do tend to support Goffman's (1963) view of the value of simple exposure in forming positive attitudes of the disabled. It was also found that urban children on the whole made more positive responses than rural children, and that children in grades three through six were more positive in rating the abilities of blind children. There was no data given on the actual ability of blind children to perform the activities presented and, therefore, there was no correlation published on perceived ability and actual ability. The work done by Richardson (1971) and Bateman (1962), as well as the conclusions of Chigier and Chigier (1970), gave support to the expected negative attitudes toward handicapped children by their nonhandicapped peers as represented by the control group in this study.

Sociometric Evaluations of the Status and Acceptability of Blind and Disabled Children

Kennedy and Buininks (1974) studied the peer status and the perceived peer status of some children in the first- and second-grades who had impaired hearing. Of the 15 children studied,
4 had mild- to moderate-impairment, and 11 had profound- and severe-hearing loss, requiring the use of hearing aids. Their findings were contrary to most of the earlier evidence collected by other investigators in that the children with the most severe hearing loss and full-time hearing aid users were consistently rated above the mean for the normal, nondisabled children and the mildly affected hearing impaired children. The data also showed that the children with hearing losses were as perceptive of their social status as were the children without a hearing impediment. Factors which the authors failed to control for were personality characteristics of those nonhandicapped children who rated the hard-of-hearing children as desirable friends.

Anderson (1973) carried out one of the most comprehensive surveys of the integrated disabled school child in Great Britain. Dealing with the physically handicapped child integrated into the ordinary classroom, Anderson surveyed the parents of these children, as well as their teachers. She also took sociometric measures from the classrooms of all 99 physically handicapped children studied. The children were all in primary school. Parents interviewed by Anderson favored regular school placement for their children in nearly all cases, stating that their children seemed happy and were achieving adequately. The major determinant of acceptance by normals cited by teachers was the sociability of the particular handicapped child in question. Teachers stated that those disabled children who were friendly and uncomplaining and were not aggressive toward their peers were accepted by their peers equally as often
as the nonhandicapped children. Those who were unsociable were reported as less often chosen in nonstructured activities and were often avoided. Thus, teachers implied that there were no factors influencing unacceptability in the disabled children that arose exclusively from being disabled.

Anderson's (1973) study confirmed earlier research that had found no specific emotional disturbance or personality characteristics for various types of disability, and the degree or severity of the handicap had little effect on the social acceptability of the individual child. Perhaps the most important finding Anderson made was that physical disability in conjunction with neurological abnormalities almost invariably was accompanied by emotional and/or behavior disturbance and the disabled child with brain damage or intellectual disfunction was generally socially retarded and rated often by his peers as undesirable as a friend. The second discovery was that the social adaptation of a disabled child was correlated more highly with intelligence than any other variable, including that of type and severity of disability.

The most serious shortcoming in Anderson (1973) was the failure of the author to include a similar group of handicapped children attending special classes full time. Without such a group to compare the surveyed group with, her assertion that regular classroom placement was the most beneficial is suspect. Second, the sociometric data was not adequately analyzed. As Jones and his fellow researchers (1972) had earlier indicated, it is imperative in sociometric studies on disabled children in integrated classrooms
to discover which children have selected the disabled child and, also, the sociometric status of those children.

Jones and his co-workers (1972) made a sociometric evaluation of 17 classrooms where 20 blind children, 11 boys and 9 girls in grades four through six, were enrolled. All of the blind children used Braille and were in a regular classroom situation for at least half the school day; 477 sighted children were enrolled in the classrooms studied. A specially designed questionnaire on the status of the class members was administered and data was collected on the rating of the blind children's status together with that of the sighted children who had listed the blind children as among their first three choices as friends. In analyzing the data, the median for each item was computed and it was then determined if the blind child fell above or below the median for that item. The same procedure was employed for those sighted children who had listed a blind child among his first three choices.

The results revealed that overall the blind children fell below the median on most of the 10 items. When looked at individually, however, the blind children were seen to have "stars and rejects." That is, some of the blind were consistently rated above the median for the classrooms as a whole and some were rated below the mean for the blind children only. When looking at the characteristic behaviors of those blind youngsters who were most accepted, it was found that:

children who were accepted tended to be personally congenial and free from annoying personality and behavior
problems: those rejected showed an opposite pattern

[Jones, Lavine, & Shell, 1972, p. 77].

The findings by Jones et al. (1972) on the characteristics of acceptability and nonacceptability of the handicapped, then, was confirmed by Anderson in her 1973 study. Therefore, the disabling condition itself does not seem to necessarily impose automatic rejection of the handicapped child. Nor, as Anderson and others have pointed out and confirmed with research, does a disability imply personal or interpersonal maladjustment.

When looking at the status of those sighted class members who had selected the blind as one of their first three choices, Jones et al. (1972) was disturbed to discover that they tended to come mostly from the sighted children who were rated below the median point for the group as a whole. Jones et al. speculated that, while the actual effects of acceptance from low status children on the self-concept and social status of the blind was unknown, it would likely be negative. They felt that much benefit would derive from programs that "systematically increase the acceptance of the blind child by his peers [p. 79]." Unfortunately, other sociometric research on the physically handicapped's status in ordinary society has not included similar evaluations that would help confirm or question the findings of Jones et al. Although the findings of these investigators were contradictory, there again was evidence that the disabled child was confronted with unfavorable attitudes from his peers. The treatment program used in this study was designed to increase positive attitudes toward the disabled and, hopefully,
increase his acceptability to his peers.

**Interaction Strain and Anxiety**

**between Disabled and Nondisabled Persons**

Davis (1961) proposed four factors inhibiting social interaction between the handicapped and nonhandicapped. The primary disturbance to social contact between the disabled individual and the normal individual was thought to be the tendency for the handicap to become the most emphasized feature of the intercourse. Second, Davis saw disability as affecting the expression of normal social greetings and interpersonal ritual, i.e., everyday cliches may be abandoned if perceived as pointing to the disability, casual humor may decrease, et cetera. Another factor seen by Davis as affecting sociability is the discrepancy between normal expectations the individual would have of the person and the attitude he or she would have toward his handicapping condition. Finally, Davis felt that the routine evaluations of common interest and possible future activity were disrupted when the normal participant in a social interaction experience was faced with an individual who posed significant limitations on future encounters.

As a result, anxiety and discomfiture arose in both the handicapped and nonhandicapped persons in a social encounter. This anxiety and discomfort, as well as the accompanying desire to escape the interaction on the part of both, Davis (1961) referred to as interaction strain. This anxiety was felt by both the disabled and nondisabled parties and both wished to escape from it and to avoid
it at other times in the future (Davis; Goffman, 1963; Jones, 1970; Schulz, 1975; Wright, 1974).

Marenelli (1974) studied the heart rates of 14 students in an undergraduate program in rehabilitation who were introduced to a facially disfigured person. The heart rates of another group of rehabilitation students who were placed in a similar encounter with a nonhandicapped person were also measured. The heartbeats per minute of each subject were measured prior to and following the group interaction with the stranger. The heartbeats of the experimental group showed significant increases over the control group. The author concluded that the state anxiety, anxiety present in the individual at the time in question, increases substantially when a nonhandicapped person encounters a stranger with a handicap. Marenelli, however, did not investigate the response of the strangers.

In a 1966 study, Kleck, Ono, and Hastorf found that the non-disabled not only showed increased anxiety around handicapped peers, but also showed a tendency to become less spontaneous and more formal. The result of this behavior, according to the authors, was that the disabled individual did not receive accurate feedback on his own manner of sociability. The subjects used were male high school juniors who were confronted by a normal individual in an interview situation or by a person in a wheel chair who was simulating a leg amputation. The galvanic skin response was monitored for each subject and an interview on his reactions to the experience followed.

In an attempt to determine if the mere presence of a disabled person was unsettling to nonhandicapped people, Jones (1970) used
college undergraduates placed in a learning situation. The students were given five repetitions of a word list to commit to memory. In one group, a blind person was present and the subjects were told he was there only to familiarize himself with the material in order to take part in a subsequent administration. Examination of the data indicated that while there was no evidence of impaired learning in the presence of the blind confederate, most of the sighted subjects had perceived a reduced performance and inability to concentrate in front of him.

Research clearly indicated the presence of increased anxiety in persons who were exposed to handicapped persons or persons they perceived to have a disability. From this evidence, it followed that children introduced to peers with a physical handicap would also respond with similar increase in anxiety beyond that normally expected from encountering a new situation.

**Peer Attitudes toward Disabled Child**

Richardson (1970) looked at the differences in attitudes toward the disabled child that resulted from age and sex. He found that attitudes toward the handicapped fell into two periods: one period from grade 2 through 11, in which there was little conformity of attitudes as determined by age or sex, and a second more stable and coherent period from grade 12 to adulthood. Richardson used pictures of a handicapped child of several types of disability and a normal, nonhandicapped youngster. He showed these pictures to normal children from kindergarten to high
school and to their parents and asked them to rank the pictures in order of preference. At all ages, the normal child was overwhelmingly preferred. The least preferred child was subject to change as a result of the participant's age and sex. Girls were found to be more conforming to peer group values, while boys were less likely to go along with the group. This tendency increased with age; girls generally disliked the child with a cosmetic handicap (overweight, facial disfigurement) most, whereas boys liked the child with a functional disability (amputee, child in a wheelchair) least. On the whole, as the subjects gained in age, there was a general increase for the child with crutches and the child confined to a wheelchair. There was a steady loss in preference for the amputee and obese child. Richardson speculated that his findings indicated the clear "emergence of a value toward the handicapped by age five and six [p. 212]."

In a 1974 study, Richardson, Gosberg, Hastorf, and Danbusch looked at the relationship between amount of exposure to disabled youth and the visibility of the handicapping condition. The subjects were boys, age 8 to 13, in a summer camp where handicapped and nonhandicapped resided together.

It was found through sociometric evaluations completed by all 193 boys in the camp that the nonhandicapped boys were consistently rated the highest and the visibly handicapped the lowest. Those handicapped boys whose disability was not visible formed an intermediate group that ranked between the other two, and were rated on a level close to the nondisabled boys by youngsters who did not
reside within their own dormitory. The work of Richardson et al. (1974) further established the unfavorable attitudes held by the nonhandicapped person concerning his disabled peer, in this instance, handicapped children with the specific disability under study here, visual impairment. Further, they suggested that while the general pattern of the unacceptability of the handicapped was confirmed, it was not cognitively organized and did not conform to that of the society at large in children before the age of 11. This implies the existence of a developing period for attitudes toward the disabled in which intervention procedures to increase positive attitudes toward the disabled and acceptability might be more effective.

Programs for Change of Attitude toward the Handicapped

Exposure to handicapped peers was found to significantly change the attitudes of female college students over an 11-week period (Urie & Smith, 1970). However, college males showed no significant change, positively or negatively, during the same experimental experience. This would tend to confirm the findings of Richardson et al. (1974), who saw no change from exposure to disability in a summer camp for boys, and those of a 1970 study by Richardson in which males were seen as less likely to change attitudes to conform to a group norm. However, there appears to be insufficient evidence for it to be concluded that exposure to disability can only change the attitudes of females in a group situation.
Marsh and Friedman (1972) used a dydactic teaching approach in an effort to foster more positive attitudes toward blind students in a high school freshman class. The program involved: role play and simulation of blindness and discussion afterward, instruction and practice with blind mobility aids, simulation of blindness by blindfolding during a short distance of travel with a sighted guide's assistance. The program had three purposes: to show that the blind could get about on their own, that they could benefit from education in a regular school program, and that the blind were "normal people and wished to be treated and thought of that way [p. 427]." Measures taken before and after the program revealed a positive effect on the attitudes of administrators and teachers at the school and a significantly favorable change in the subjects involved in the program. Blind children in the school were interviewed and reported that they had noticed a positive change in the attitudes of their classmates toward them. There was no nontreated control group to compare with the group that received the training, and it is difficult to tell if the program itself was responsible for the change in attitudes. Some of the change could possibly be attributed to the influence of the pretest, to the effects of being in a training program in and of itself, or to the general exposure of the students to blind peers over the course of the five sessions. Observations of interaction between the sighted and blind children could have possibly strengthened the study.

Clore and Jeffry (1972) used a more balanced design than Marsh and Friedman (1972) in investigating the value of disability
simulation in changing attitudes toward the disabled. There were three groups of college students involved, one group which was confined to wheelchairs during a trip around campus, a second group which accompanied the first group as walking companions, and a control group that did not participate in the wheelchair experiment. A disabled girl in a wheelchair acted as guide for the wheelchair tour and later administered materials used for measuring attitude change to all three groups at the same time from her wheelchair. Results showed that both the wheelchair group and their walking companions scored significantly higher than the control group. A follow-up procedure 4-months later gave similar results. It was concluded by the authors that role playing, when confined to a setting the subject finds natural, would have a positive effect on both long term acceptance and short term acceptance of the disabled by the nonhandicapped.

Wilson and Alcorn (1969), however, were able to find no significant attitude change resulting from disability simulation. They had college students, randomly selected from two classes in psychology of exceptional children, pick a physical handicap and simulate it for 8 hours. The Attitudes Toward Disabled Persons (ATDP) Scale was administered to the experimental group and a control group before and after the role play. No significant increase in positive attitudes toward the disabled was found in the experimental group. The authors pointed out a possible insensitivity on the part of the ATDP in measuring change of attitude so quickly, or possible disruption of existing attitudes but not formation of
new ones from the role play and, finally, mention that the role playing may not have affected either the development or evaluation of attitudes toward the disabled as reasons for the lack of change. Another possible factor could have been the failure to structure the simulation of disability so that there was more control over the subjects participating in it and the type of disability. If the subjects simply remained in their rooms or kept travel and communication with others at a minimum and did not expose themselves to their everyday world, it would seem that very little change could be expected.

Wilson in 1971 again investigated the use of disability simulation as a means of altering attitudes toward the handicapped. Using college students, he had one group simulate deafness for 2-1/2 hours while participating in a series of directed activities. Another group was assigned to observe a graduate student who had minimal training in manual communication interview a deaf freshman, while a control group did not participate in any of these activities. The students who observed the deaf-hearing interview showed an increase of positive attitudes toward the deaf. Decreased ratings of the deaf were found for the simulation and control groups. Subsequent to the testing, all the subjects were placed in a face-to-face encounter with a deaf stranger for 2-1/2 minutes. The deaf persons were assigned to be either active or passive in the interview. Manifest anxiety level was measured for each subject following the interview. There was no significant variation between the three groups recorded.
Wilson (1971) did not establish a base rate for anxiety prior to or following the interview or testing, and no measure of fluctuation in the subject's levels of anxiety was considered. The time allowed for the interview situation was brief and the high levels of anxiety recorded in almost all of the subjects could have simply been due to a normal reaction while encountering a stranger in an experimental setting. The author failed to make known the nature of the exercises in which the deaf simulation subjects were participants. As Clore and Jeffry (1972) found in their latter study, the naturalness of the environment was a major determinant in change of attitude toward disability through disability simulation. It would seem reasonable to expect that the subjects should have been engaged in exercises they would find relevant to their normal life outside the experiment.

Investigations into the changing of attitudes toward the disabled were contradictory in their evaluation of techniques, such as role play or simulation of disability, exposure to handicapped persons, and formal presentations on disability. In particular, disability simulation was found to have varying success. Clore and Jeffry (1972) met with considerable success with this procedure, while Wilson and Alcorn (1969) were decidedly unsuccessful. The difference between these two studies appeared to be the added structure of the Clore and Jeffry study. They recommended that the disability simulation be carried out in a setting natural and comfortable to the individual. In his latter study, Wilson (1971) seemed to add greater structure and supervision to his use of
disability simulation; however, he does not seem to have made the experience one that was natural to the subject.

The simulation of disability by the nondisabled without supervision or a structured setting has often been done in order to have them experience the difficulties of the handicapped individual. This study has been designed to provide the subject with a structured, supervised disability simulation in an environment in which he is comfortable. In addition, preliminary to the simulation experience, the participant was exposed to a group guidance program designed to increase his awareness of others' feelings and individual differences. Prior to the simulation, the student was further instructed on mobility and orientation techniques to help him more easily adapt to the disabling condition. This was done in an effort to provide him with a sense of mastery or ability to function in the disabled person's role. It was thought that a decrease in frustration would lead to increased positive attitudes in place of a possible aversion to the disabled and increased fear of the disabling condition.

**Summary**

The research presented above indicated that the handicapped are less accepted by nonhandicapped persons than are other nondisabled individuals, and that the nondisabled do exhibit anxiety when encountering an unfamiliar person with a disability. It also indicated that an awareness of difference between the handicapped and nonhandicapped, as well as a particular attitude toward a disabled individual, begins to form at about age 5 and undergoes change until about age 18 when a group value concerning disability
becomes noticeable. It would seem, from the research, that while the integrated classroom was beneficial to the exceptional child and he could adjust adequately and feel good about his placement, that models for educating the nonhandicapped in an understanding of the disabled child's world is desirable to increase the acceptance of the disabled child by the majority of his peers. Possible education programs could incorporate exposure to disability, simulating and role playing a disabled child, programs in awareness of others, and direct teaching of disability and the proper approaches one should take toward the handicapped.
Chapter 3
Methodology
Subjects

The subjects in this study were divided into two population categories: (a) sighted and (b) visually handicapped. The sighted subjects were fifth- through eighth-grade students at Walsingham Lower School, Williamsburg, Virginia. The school is a private parochial school which is approximately equally composed of Roman Catholic and Protestant students, with no other religious faiths represented. The school is racially integrated, but is significantly more white than the racial balance of the community. Though generally average or above average in intelligence and achievement, the students come from upper-middle-income families. The teaching faculty consists of equal numbers of lay teachers and members of the Sisters of Mercy.

The visually handicapped subjects were composed of seven clients from the Educational Services Division, Virginia Commission for the Visually Handicapped, Richmond, Virginia, ages 10 through 13, and 10 students in grades five through seven at the Virginia State School for the Blind, Hampton, Virginia. Children from the Educational Services Division resided at home and attended public schools in a regular classroom situation. Subjects at the Virginia State School for the Blind reside at the school and are full-time students there or reside locally with their
parents and attend classes at the school during the day. In the main, the children at the school in Hampton have less vision than the children attending regular classes in the public school. Visually handicapped students who were mentally retarded were eliminated from consideration as participants in the study.

Selection and Assignment of Subjects

Sighted fifth- through seventh-graders from Walsingham Lower School were randomly selected for participation in the project; 18 children were selected and permission to participate was obtained from their parents and the consent of each child was received prior to the initiation of the experiments. No students who had had prior contact with blind persons were considered for participation. Following their selection, the children were randomly assigned to one of three experimental groups, with six children assigned to each group.

Children from the Virginia State School for the Blind and the visually handicapped were also selected at random from the population available. Consent was obtained from the Virginia State School for the Blind for their residential students to participate. Parental consent for each child was obtained. Each of these subjects was assigned at random to participate in a group task with one of the three sighted groups.

Procedures

A single group (group E1) received group guidance in
understanding the feelings of others and the effect of their behavior on others' feelings. They also simulated blindness by being blindfolded throughout the course of a regular school day during the last week of training. Instruction in mobility was given to these subjects prior to their undergoing the disability simulation. The second group (group E₂) was given the same group training but was not involved in the disability simulation. The control group (group E₃) was not involved in the training or role play at any time, but partook in a special discussion group on religion.

At the completion of the group training, the two experimental groups and the control group were administered the Empathetic Perception Inventory. This procedure was used to measure the effect the guidance program had on increasing the ability of the group members to perceive empathy.

During the last week of the guidance program, the subjects in group E₁ were given a 35-minute period of instruction on the use of a cane for mobility. No blindfolds were used at this time and the subjects were simply asked to keep their eyes closed. They were also given instruction on how to be led by a sighted guide and told that they should provide for others to read for them, take notes, or otherwise assist them during the simulation experience. The children in group E₂ had a 35-minute meeting to help plan the trip to the Virginia State School for the Blind.

On the day of the simulation experience, each subject
reported to the school counselor when he or she arrived for blindfolding. Each was told to remove the blindfold at anytime if they felt they could keep it on no longer and to report to the counselor immediately after doing so. The experience began at 8:15 a.m. and was terminated at 2:00 p.m. when the subjects met in the counselor's office to discuss the experience and their feelings about it and themselves.

The three sighted groups were then taken to the Virginia State School for the Blind at Hampton. Each group was introduced to a comparable number of visually handicapped children composed of students from the Hampton school and those already in the public school system. This resulted in three groups of sighted and visually handicapped children, i.e., group $E_1$ with an equal number of visually handicapped children, group $E_2$ and an equal number of handicapped students, and group $E_3$ and a comparable number of visually handicapped children. Each of the combined sighted-handicapped groups was given the same group task to perform. The group task was to determine what items from a list should a scientific team stranded on the moon discard in order to move most quickly to a place of rescue. Each of the three groups was to arrive at a group list from which a winner would be declared.

The combined groups were seated in such a fashion that there was a sighted person sitting next to a nonsighted person. For the nonsighted children to participate, it would be necessary for the sighted children to read or otherwise assist them. After the
allotted time, the sighted children were administered the State Trait Anxiety Inventory for Children (STAIC) and ATDP in one room, while the handicapped children completed the same instrument in another room. The sighted children were proctors and there were readers present to administer the test instruments to the handicapped children. (Note: Video tapes were made of each task group for behavior ratings but technical problems resulted in their not being usable for this purpose.)

Group Guidance Program

The group guidance program was composed of group exercises taken from Johnson (1972) and Dupont, Gardner, and Brody (1974). Johnson's work dealt with communication between people and the building of relationships along the lines proposed by Robert Carkauff (1969) and George Gazda (1972). Dupont et al. have published the Toward Affective Development classroom instruction program for upper elementary school children. It consists of a series of group exercises fashioned for use in the classroom and designed to give the student cognitive and emotional understanding of himself and others.

Modifications were made in some of the group exercises selected from these sources for use in this study. The changes were made in order to increase the group member's understanding and awareness of blind children in particular and handicapped children in general. The purpose of the group training was twofold. First, it was aimed at helping to shift the student's preoccupation with his own needs to the feelings of others. Second, the group work
was structured so as to make the blindness simulation more meaningful to the participants by giving them exposure to the difficulties others face and how they cope with them. The group training covered a period of 5-1/2 weeks, two meetings per week for the first 5 weeks and a single meeting in the last week of training (Appendix D).

The format of the training program was heavily influenced by the work of Jean Piaget (1928; 1932) and Lawrence Kohlberg (1963; 1964) who have linked the child's cognitive development with his social and affective development. Piaget felt that the child is socially egocentric, i.e., perceives his world and interprets it according to his understanding until approximately the age of 9 or 10. At this time he would have achieved the cognitive capacity to begin to incorporate the thoughts and feelings of others into his thought system. This was more a stage during which he shed his egocentricity or self-orientation than developed a consciousness of others. By age 12 or 13, Piaget stated, the child was capable of perceiving the feelings of others and according them an active place in his environment. It was on this "de-centering" stage in the child's development that this program proposed to focus by assisting the child in experiencing peer relationships safely and more fully under the direction of a group facilitator.

**Group Leaders**

The two group leaders (Appendix E) were both graduate students in education at the College of William and Mary, Williamsburg, Virginia. Each had had previous experience as a classroom teacher, and they were recommended by their professor.
from an introductory group theory and techniques class. They led each of the 11 group sessions.

**Instruments**

**Empathetic Perception Inventory**

The Empathetic Perception Inventory (EPI) consists of 6 problem situations and 43 response statements which were to be evaluated by the subject. They were taken from Gazda's *Human Relations Development* (1972). Each situation and its possible responses measure the subject's ability to perceive empathy on a one to four scale, with one representing a complete lack of empathy and four the highest level of a verbally communicated empathetic response. Gazda provides a scoring key for each response which was modified by the writer (Appendix A). Each problem situation selected is focused on the elementary school child with the exception of situation one which is used as a global measure of empathy. The situations and responses used by Gazda are developed directly from the theoretical framework of his writings as well as those of other authors such as Carkhuff (1969).

**State Trait Anxiety Inventory for Children**

The STAIC (Spielberger, Gorsuch, & Lushene, 1973) is a revised form of the State Trait Anxiety Inventory for adolescents and adults. The STAIC is designed as a research instrument in measuring anxiety in children (Appendix B). The test has been developed specifically for use with children 8- to 12-years-of-age but can be used by younger children with average or above average
The STAIC consists of one question and answer sheet with 20-item statements to which the child responds on each side. On one side of the answer sheet are 20 items designed to measure state anxiety in the respondent or how he was feeling at that moment. The other 20 items measure how the child generally felt. State anxiety is looked at as less stable and fluctuating, while trait anxiety was seen as a stable characteristic (Spielberger et al., 1973). The authors defined anxiety as "feelings of apprehension, tension, and worry." The questionnaire was developed to be self-administered, individually or in groups.

Test-retest reliability for the normative sample of 246 elementary school students was reported by Spielberger, Gorsuch, and Lushene (1973) as .65 for boys and .71 for girls in the trait anxiety scale and .31 (males) and .47 (females) for the state anxiety scale. The authors pointed out that state anxiety should not be highly correlated in a test-retest reliability measure. Using the alpha coefficient method of determining internal consistency, reliability for the state anxiety scale was reported as .82 for boys and .87 for girls. Concurrent validity for the STAIC was reported as good by the authors who correlated it with the Children's Manifest Anxiety Scale (CMAS) (.75) and the General Anxiety Scale for Children (.63).

In an Australian study, Gaundry and Poole (1972) found support for the state-anxiety scale of the STAIC. Boys and girls in the ninth grade were ranked by their English teachers into two groups,
high achievers and low achievers. The children were then randomly assigned to either a success group or a failure group and the state scale was administered to them. Then, both groups were given what they believed was the same vocabulary test. However, the success group was given a test that was significantly less difficult than the failure group and the scores were recorded on a board in view of all the children. An immediate posttest with the state scale of the STAIC was performed. State anxiety rose significantly in the failure group and declined in the success group. The authors concluded that the STAIC was an effective and useful instrument for measuring fluctuations in the level of anxiety in children in different situations.

Edwards (1972) studied the effects of forced integration on black students and white students in fourth- through seventh-grades. Half of the children were forced to transfer in mid year to integrated classrooms while the others were unaffected. Trait anxiety remained stable for race and sex; state anxiety for those children forced to transfer schools in midyear increased significantly over those who remained in their original classes.

Using fifth- and sixth-grade boys, Montuori (1971) divided them into groups of high- or low-trait anxiety children. He then randomly assigned the boys to a high- or low-stress situation which he felt was represented by having them take the STAIC Anxiety-State scale and the CMAS with one group being told it was a game and the other that it was a test. There was no significance found between the high-low stress groups in state-anxiety or the CMAS, but those
in the high trait-anxiety category consistently increased in state-
anxiety and those in the low trait-anxiety category remained stable
regardless of the stress level. Correlation between the CMAS and the
STAIC Anxiety-state was reported as good.

Attitudes toward Disabled Persons—Revised for Children

The Attitudes toward Disabled Persons—Revised for Children
(ATDP-C) was designed specifically for use with children from the
fourth grade on. The original scale for the ATDP had been found
to be unsuitable for children due to the reading level and answer
scale. Besides the change in reading level, the phrase "physically
handicapped" on the ATDP was replaced with "crippled" and the writer
further modified this to include the phrase "blind or crippled."

A third change in the scale was the emphasis on face validity and
making it relevant to the environment of the children. The test
items in the final version were related closely to the intent of
the original statements of the ATDP as determined by a panel of
judges.

There were two forms of the ATDP-C, one of positive state-
ments concerning the disabled child's abilities and one with
negative statements. The child was to respond "true" or "false"
to each statement. Both forms were intended to be self-administered.
The original ATDP for adults was found to have split-half
reliability ranging from .72 to .85 by various researchers (Yuker,
Block, & Young, 1970) and reliability coefficients ranging from
.66 to .89 for its various forms. Friedman (1975) cautioned that
Although the new version appears to have face validity further field testing is needed to determine the reliability coefficient between the ATDP and ATDP-C. Therefore, the present version is intended for research purposes only [p. 19].

Luzar, Gensley, and Orpet (1976) have used the ATDP with gifted 8- and 9-year-olds and found it quite adequate for such use. They made use of the ATDP for adults, form 0, with only slight changes in vocabulary, e.g., they substituted "crippled" for the words "disabled" and "handicapped." Siller, Ferguson, Chipan, and Van (1967) while working with junior high school youngsters correlated the ATDP with numerous other devices, e.g., Welsh Anxiety Scale, Maslow Security-Insecurity Scale, Marlow-Crowne Social Desirability Inventory, and found it to be a valid and reliable instrument for assessing attitudes toward the handicapped.

**Experimental Design**

The design of this study utilizes two separate 3 x 1 factorial designs (treatment group by sighted and treatment group by blind) as shown in Figure 1. Both designs were experimental treatment with posttest only.

**Statistical Analysis**

The statistical analysis for the effectiveness of the group training is made by a one-way analysis of variance with orthogonal contrasts on all dependent measures. The hypotheses to be tested are:
Figure 1. Experimental design of the study.
Hypothesis 1

Sighted children with the group training and blindness simulation experience (group E₁) will have no significant difference in attitude toward the disabled following the visually handicapped/sighted task group experience than the other two groups of sighted children.

Hypothesis 2

This same group of sighted children (group E₁) will have no significant difference in level of anxiety following the handicapped/sighted task group experience than the other two groups of sighted children.

Hypothesis 3

Visually handicapped children interacting with group E₁ will have no significant difference in level of anxiety than those visually handicapped children involved with the other two groups.

Hypothesis 4

The sighted children with only the group training (group E₂) will have no significant difference in positive attitudes toward the blind than the sighted children who received no training and did not participate in the blindness simulation.

Hypothesis 5

These sighted children (group E₂) will have no significant difference in level of anxiety immediately following the sighted/blind group task than the sighted children who received no training and did not participate in the blindness simulation.
Hypothesis 6

The visually handicapped children involved with these sighted youngsters will show no significant difference in level of anxiety than those children interacting with the sighted children without training.

Hypothesis 7

The experimental control group (group E3) or the group of sighted children without group training or disability simulation will have no significant difference in attitudes toward the blind than the sighted children in the other two groups.

Hypothesis 8

The control group (group E3) of sighted children will have no significant difference in level of anxiety following the sighted/blind task group than the children in the other two groups.

Hypothesis 9

The visually handicapped children interacting with group E3 will have no significant difference in their level of anxiety than those visually impaired children involved with the two experimental groups.
Chapter 4

Results

This chapter reports the results of the study. The statistical findings are reviewed and interpreted for each hypothesis.

A one-way analysis of variance with orthogonal contrasts for the EPI was performed. The results are illustrated in Table 1. Comparing the combined simulation and training group scores to those of the control group resulted in a t value of -12.500, p < .058. This test indicates that the subjects with group training tended to have a greater ability to perceive empathy than the control group, suggesting the group guidance program tended to accomplish its goals.

Hypothesis 1

Sighted children with the group training and blindness simulation experience will show no significant difference in positive attitudes toward the visually handicapped following the sighted/blind task group than the other two groups.

A one-way analysis of variance with orthogonal contrasts was performed to determine if the simulation group differed significantly from the control group on attitudes as measured by the ATDP. Table 2 illustrates the results of this test. A t value of -2.000, p < .065 was obtained for contrast 1 which compared the simulation and training groups to the control group. The simulation group compared with the training subjects (contrast 2) resulted in a
Table 1
Orthogonal Contrasts of the Three Sighted Treatment Groups for the Empathic Perception Inventory

<table>
<thead>
<tr>
<th>Group</th>
<th>Value</th>
<th>Standard deviation</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simulation</td>
<td>36.500</td>
<td>6.834</td>
<td>2.790</td>
</tr>
<tr>
<td>Training</td>
<td>33.000</td>
<td>3.347</td>
<td>1.366</td>
</tr>
<tr>
<td>Control</td>
<td>41.000</td>
<td>6.403</td>
<td>2.664</td>
</tr>
</tbody>
</table>

Orthogonal contrasts

<table>
<thead>
<tr>
<th>Con-Contrast</th>
<th>Sim-Contrast</th>
<th>Train-Contrast</th>
<th>Value</th>
<th>Standard deviation</th>
<th>Standard error</th>
<th>Degrees of freedom</th>
<th>Value of prob-free-ability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-2</td>
<td>-12.500</td>
<td>6.059</td>
<td>-2.063</td>
<td>14</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>-1</td>
<td>0</td>
<td>-3.500</td>
<td>3.286</td>
<td>1.065</td>
<td>14</td>
</tr>
</tbody>
</table>
Table 2
One-way Analysis of Variance with Orthogonal Contrasts for the Sighted Subjects Scores on the Attitudes toward Disabled Persons

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>Degrees of freedom</th>
<th>Sum of squares</th>
<th>Mean squares</th>
<th>F ratio</th>
<th>F probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>4,082</td>
<td>20,405</td>
<td>1.982</td>
<td>0.175</td>
</tr>
<tr>
<td>Within groups</td>
<td>14</td>
<td>14,133</td>
<td>10,295</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>18,940</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Analysis of variance

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simulation</td>
<td>18.000</td>
<td>3.632</td>
<td>1.483</td>
</tr>
<tr>
<td>Training</td>
<td>20.333</td>
<td>3.615</td>
<td>1.476</td>
</tr>
<tr>
<td>Control</td>
<td>21.800</td>
<td>1.789</td>
<td>0.800</td>
</tr>
</tbody>
</table>

Orthogonal contrasts
**Table 2 (continued)**

<table>
<thead>
<tr>
<th>Contrast</th>
<th>Sim-Contrast</th>
<th>Train-Contrast</th>
<th>Value</th>
<th>Standard Error</th>
<th>Variance Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-2</td>
<td>-5.267</td>
<td>3.416</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>-1</td>
<td>0</td>
<td>-2.333</td>
<td>1.853</td>
</tr>
</tbody>
</table>

^ t Degrees of freedom
t value of -1.115, p < .291. There is insufficient strength in contrast 2 to attribute any gain in positive attitudes toward the disabled to the effects of the disability simulation experience.

**Hypothesis 2**

Sighted children in the simulation group (group E₁) will exhibit no significant difference in level of anxiety than the other two groups of sighted children.

A one-way analysis of variance with orthogonal contrasts was run to determine if the simulation group has a significantly lower level of anxiety than the sighted control group as measured by the State Anxiety Scale of the STAIC. Table 3 reports the result of the test. No significance was found to exist.

**Hypothesis 3**

Visually handicapped children interacting with group E₁ will have no significant difference in level of anxiety than those visually handicapped children involved with the other two groups.

A one-way analysis of variance with orthogonal contrasts was run on the visually handicapped subjects' scores. Table 4 illustrates the results. Contrast 1 compared the combined groups of visually handicapped subjects interacting with the sighted simulation and training groups to those interacting with the sighted control group (t = -1.787, p < .096). Contrast 2 compared those visually handicapped subjects interacting with the sighted simulation group to those interacting with the sighted training group (t = .283, p < .781). Contrast 2 does not indicate that lower levels of
Table 3
One-way Analysis of Variance with Orthogonal Contrasts for the Sighted Subjects
Scores on the State Anxiety Scale

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>Degrees of freedom</th>
<th>Sum of squares</th>
<th>Mean squares</th>
<th>F ratio</th>
<th>F probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>46.300</td>
<td>23.150</td>
<td>0.518</td>
<td>0.607</td>
</tr>
<tr>
<td>Within groups</td>
<td>14</td>
<td>625.466</td>
<td>44.676</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>671.767</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Group Mean Standard Standard
<table>
<thead>
<tr>
<th></th>
<th></th>
<th>deviation</th>
<th>error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simulation</td>
<td>29.667</td>
<td>6.121</td>
<td>2.499</td>
</tr>
<tr>
<td>Training</td>
<td>33.333</td>
<td>7.712</td>
<td>3.148</td>
</tr>
<tr>
<td>Control</td>
<td>32.800</td>
<td>5.933</td>
<td>2.653</td>
</tr>
</tbody>
</table>
Table 3 (continued)

<table>
<thead>
<tr>
<th>Contrast</th>
<th>Value</th>
<th>Standard error</th>
<th>Variance estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>$t$ Degrees $t$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Value of prob-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>freeability</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-2</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>-1</td>
<td>0</td>
</tr>
</tbody>
</table>
Table 4  
One-way Analysis of Variance with Orthogonal Contrasts for the Visually Handicapped Subjects Scores on the State Anxiety Scale

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>Degrees of freedom</th>
<th>Sum of squares</th>
<th>Mean squares</th>
<th>F ratio</th>
<th>F probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>166.486</td>
<td>83.243</td>
<td>1.638</td>
<td>0.230</td>
</tr>
<tr>
<td>Within groups</td>
<td>14</td>
<td>711.633</td>
<td>50.831</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>878.119</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Analysis of variance

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simulation</td>
<td>31.833</td>
<td>5.419</td>
<td>2.212</td>
</tr>
<tr>
<td>Training</td>
<td>33.000</td>
<td>7.403</td>
<td>3.022</td>
</tr>
<tr>
<td>Control</td>
<td>39.220</td>
<td>8.526</td>
<td>3.813</td>
</tr>
</tbody>
</table>
Table 4 (continued)

<table>
<thead>
<tr>
<th>Contrast</th>
<th>Value</th>
<th>Standard error</th>
<th>Variance estimate</th>
<th>t</th>
<th>Degrees of freedom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>-2</td>
<td>-13.567</td>
<td>7.590</td>
<td>-1.787</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>-1 0</td>
<td>-1.167</td>
<td>4.116</td>
<td>-0.283</td>
</tr>
</tbody>
</table>
anxiety in the visually handicapped subjects could have been the result of interacting with sighted children who had simulated blindness.

**Hypothesis 4**

The sighted children with only the group training (group $E_2$) will have no significant difference in positive attitudes toward the blind than the sighted children who received no training and did not participate in the blindness simulation.

The hypothesis could not be tested directly. Contrast 1 of Table 4, however, does indicate that the combined simulation and training groups tended to be more positive in their attitudes than the control group ($t = -2.000, p < .065$), while contrast 2 shows that there is no difference in attitudes between the simulation and training groups ($t = -1.115, p < .291$). This suggests that the group guidance training in affective development was instrumental in accounting for any gain in positive attitudes toward the disabled.

**Hypothesis 5**

These same sighted children (group $E_2$) will have no significant difference in level of anxiety following the sighted/blind task group than the sighted subjects who received no training and did not participate in the blindness simulation.

Table 3 reports that a one-way analysis of variance with orthogonal contrasts was run on the sighted children's scores on the state anxiety scale. No significant difference was found.
Hypothesis 6

The visually handicapped children involved with these sighted youngsters will show no significant difference in level of anxiety than those children interacting with those sighted children without training.

The hypothesis could not be tested directly. Table 4 illustrates the results of a one-way analysis of variance with orthogonal contrasts. Contrast 1 indicates that the visually handicapped subjects interacting with the sighted children who had received group guidance in affective development tended to have lower levels of anxiety than those interacting with the sighted control group ($t = -1.767$, $p < .096$). Contrast 2 shows no difference in anxiety as measured on the state anxiety scale for those handicapped subjects interacting with the sighted simulation group and those interacting with the sighted training only group ($t = -.283$, $p < .781$). This suggests that the group training program with the sighted children had an effect on the level of anxiety in the visually handicapped subjects.

Hypothesis 7

The experimental control group (group E₃) or the group of sighted children without group training or disability simulation will have no significant difference in attitudes toward the blind than the sighted children in the other two groups.

A one-way analysis of variance with orthogonal contrasts was performed to determine whether the sighted subjects in the
combined simulation and training groups had more positive attitudes toward the blind and disabled than the control group. Table 2 illustrates the results of this test. Contrast 1 ($t = -2.000, p < .065$) indicates that the children who received the group training tended to have more positive attitudes toward their blind and handicapped peers than the children in the control group.

**Hypothesis 8**
The control group (group $E_3$) of sighted children will have no significant difference in level of anxiety following the sighted/blind task group than the children in the other two groups.

A one-way analysis of variance with orthogonal contrast was run on the state anxiety scale of the STAIC. No significant difference was found to indicate that the control group had a higher level of anxiety (Table 3).

**Hypothesis 9**
The visually handicapped children interacting with the sighted control group will not have higher levels of anxiety than those handicapped children involved with the other sighted experimental groups.

A one-way analysis of variance with orthogonal contrasts was performed. Table 4 illustrates the results of this test. A $t$ value of $-1.787, p < .096$ (contrast 1) was obtained when the handicapped control subjects were contrasted with the combined simulation and training groups. This suggests that the subjects in the training program tended to be effective in creating less
anxiety producing situations in the handicapped children.
Chapter 5

Summary, Conclusions, and Recommendations

A brief summary of the investigation and its findings are presented in this chapter. Conclusions and implications have been drawn from the findings and will be presented with recommendations for future research.

Summary

This study investigated a group guidance program combined with a disability simulation experience with nonhandicapped fifth-, sixth-, and seventh-graders and its effects on their attitudes and reactions to handicapped peers. There were three groups of sighted children from a parochial school randomly assigned to one of three treatment groups. A group received training in understanding the feelings of others. A second group received this same training together with a disability simulation experience. The simulation experience consisted on being blindfolded throughout most of 1 school day. It was terminated 1 hour prior to the end of the school day and closed out with a group discussion of the experience. The third group did not participate in any of these experiences and was used as a control group.

Following the completion of the training and disability simulation, the three sighted groups were taken to a residential school for the blind where each group was introduced to an equal number of visually handicapped peers from the school and the local
community. The three combined groups of sighted and nonsighted subjects were then given the same group task to perform. After each of these combined groups had carried out the task, its members were measured for levels of anxiety and attitudes toward the handicapped.

Findings and Interpretations

Hypotheses were formulated for the results from the measures of anxiety and attitudes toward the blind and disabled. The nine hypotheses are:

Hypothesis 1

Sighted children with group training and blindness simulation will show more positive attitudes toward the disabled than the other two groups of sighted children.

The first hypothesis was tested by means of a one-way analysis of variance with orthogonal contrasts on scores for the ATDP. It compared the combined simulation and training groups to the control group. The results of this comparison suggested a trend toward more positive attitudes in the children receiving group training. In comparing the simulation to the training subjects, no difference was found. Therefore, it could not be stated that the simulation experience resulted in an increase of positive attitudes toward the handicapped.

Hypothesis 2

Sighted children in the simulation group will have less anxiety following the blind/sighted task than the other two groups of sighted children.

A one-way analysis of variance with orthogonal contrasts
was run. There was no significant difference found in the level of anxiety between the sighted groups of children.

**Hypothesis 3**

Visually handicapped children interacting with the simulation group will have less anxiety than those handicapped children interacting with the sighted training and control groups.

A trend toward less anxiety in the handicapped children involved with the combined simulation and training groups was found. However, there was no difference in level of anxiety between the blind children working with the simulation group and those working with the training only group. The simulation experience did not appear to have resulted in a greater effectiveness in nonhandicapped children to reduce anxiety in their visually handicapped peers.

**Hypothesis 4**

Sighted children with the group training will have more positive attitudes toward the disabled than those who have not participated in the training program.

Using one-way analysis of variance with orthogonal contrasts, a trend toward more positive attitudes in the combined simulation and training groups \( t = -2.00, p < .065 \) was found. This, coupled with the absence of any difference between the simulation and training groups, would indicate that any increase in positive attitudes was more likely the result of the group guidance program in affective development.

**Hypothesis 5**

Sighted children with the group training will manifest
less anxiety immediately following the blind/sighted task experience than those without the training.

A one-way analysis with orthogonal contrasts was run. The analysis failed to detect any substantial differences in the levels of anxiety between the three groups of sighted children.

**Hypothesis 6**

The visually handicapped children interacting with sighted children who have had the group guidance program will exhibit less anxiety following the blind/sighted task than those involved with the sighted control subjects.

A comparison between the handicapped children involved with the combined simulation and training groups and those introduced to the control group showed a trend toward greater anxiety for those interacting with the sighted control subjects. No difference was detected in the level of anxiety between those children who worked with the simulation group and those involved with the training group. Though there is no direct evidence, it may be inferred that any reduction of the sighted subjects’ behaviors that would create anxiety in their blind peers was a result of the program in affective development and not blindness simulation.

**Hypothesis 7**

The control group or those sighted children without affective development training or blindness simulation will have less positive attitudes toward their visually handicapped peers.

A one-way analysis of variance with orthogonal contrasts was performed to determine whether the combined simulation and training
groups had more positive attitudes than the control group. A t value of -2.00, p < .065, resulted. This indicated a strong trend toward more positive attitudes having been formed by the sighted children in the training and simulation groups.

Hypothesis 8

The sighted control subjects will exhibit higher levels of anxiety immediately following the blind/sighted task experience than the other two groups of sighted children.

A one-way analysis of variance between the combined simulation and training groups, and the control group was performed. No significant difference was found.

Hypothesis 9

Visually handicapped children interacting with the control group will have higher levels of anxiety than the visually handicapped children involved with the two other experimental groups.

A one-way analysis of variance with orthogonal contrasts was performed to test Hypothesis 9. The results of the findings showed that there was some difference between the levels of anxiety present in the handicapped subjects involved with the control group and those who had interacted with the other two sighted groups. While not significant, the results did show a trend in the simulation and training group subjects for an increased ability to interact with handicapped peers and positively affect their feelings and responses.

Abstractions on Interpretations

The basis of Goffman's (1963) theory was that the attitudes
and values an individual held for a disabled person were learned. He felt that generally these attitudes were negative and, consequently, resulted in feelings of anxiety and even hostility when encountering a handicapped person. At the same time, the disabled person was aware of the attitudes and feelings of the nondisabled individual and also experienced feelings of anxiety. The findings of this study tend to support Goffman's theory. Although no difference in the level of anxiety between the sighted groups was found, the children who received the group training did show more positive attitudes toward the handicapped. The visually impaired subjects who interacted with these children were found to have less anxiety than those who were involved with the sighted control group.

The increased positive attitudes toward the handicapped may, then, have resulted in the visually handicapped children having less anxiety. It may be supposed that the sighted children having positive values for the handicapped presented their visually impaired peers with behaviors that expressed these values. Consequently, the handicapped subjects were perhaps able to interact with them more freely and leave the joint group task more relaxed.

The failure of the three sighted groups to differ in level of anxiety might have been due to their having been introduced to the blind children in the company of others they had known for at least 5 weeks even though they were from different grades and classes. This was not the case for the visually handicapped children who were brought together for the first time. They were from different grades at the Virginia School for the Blind and half were students
attending other schools or had tutors at home. As a result, they did not have the group security and identity afforded the sighted children and reacted to the situation more as individuals than as a group.

**Conclusions**

From the present study it can be concluded that an affective development program focused on understanding others is a potentially effective means of forming positive attitudes in nondisabled children for their disabled peers. The program would also reduce the tension normally present when handicapped and nonhandicapped persons first encounter each other.

**Implications for Practice**

From the strong trends found in the data even in the absence of statistical significance, the present investigation indicates that the school in which a handicapped child is scheduled to enter can provide its students with affective development training that will ease the tension of the initial encounter between the nondisabled and the handicapped. Where handicapped children are already present, an affective development program similar to the model used here can increase the understanding of a handicapping condition for both the nonhandicapped and handicapped alike. Further, it could lead to more positive attitudes and acceptance of the disabled child by his nondisabled peers and, possibly, a more favorable self-identity in the handicapped. In school systems where no disabled children are enrolled or expected to enroll, such a guidance
program could be of value in the forming of positive values for the handicapped which will increase the likelihood that encounters with disabled persons will be favorable.

**Recommendations for Further Research**

Future research should explore other handicapping conditions in order to determine whether such a training program generalizes to the full range of handicaps. As anxiety was absent in the sighted groups, it is recommended future research consider a one-to-one encounter with a handicapped stranger rather than groups when anxiety is being measured.

The role of disability simulation could not be adequately assessed in this study as there were not enough visually handicapped children of the specified age and grade in the area to include a group of sighted children who simulated blindness only. Further research should attempt to determine this effect. Where possible, other investigators should also increase the number of groups to be assigned to each treatment level for additional statistical power.
Appendix A

Empathetic Perception Inventory

Administering the Empathetic Perception Inventory

The Empathetic Perception Inventory (EPI) is a self-administered scale to be given individually or to groups. It can be used with children or adults reading on at least a fifth-grade level. The problem situations and responses used can be found in Human Relations Development: A Manual for Educators (Gazda, 1973). Problems 1 and 2 can be found in Chapter 8 and are labeled "Helping Situation 1" and "Helping Situation 2." Problems 3, 4, and 5 are in Chapter 9 under the headings "Helping Situation 2," "Helping Situation 3," and "Helping Situation 4," respectively. The final problem, number 6, is in Chapter 13 and is designated "Helping Situation 8."

The examiner is to read the directions aloud while the children read along silently. After reading the directions, the examiner should ask for and answer any questions the subjects may have.

Scoring the Empathetic Perception Inventory

The scoring system is an adaptation of the ratings given by Gazda (1973) to each response. The 1/2 point system used by Gazda
is felt to be too confusing for children and others not specifically trained in the Gazda empathy program. Where Gazda has rated a response with a half point, e.g., .5, 1.5, 2.5, or 3.5, the answer has been elevated to the next nearest whole number to conform to the scoring system used on the test. That is, an answer rated 2.5 by Gazda will be scored as 3.

Scoring Key for the Empathetic Perception Inventory

1. 2
2. 2
3. 3
4. 2
5. 4
6. 4
7. 2
8. 4
9. 3
10. 3
11. 3
12. 4
13. 3
14. 2
15. 1
16. 3
17. 1
18. 1
Appendix B

State-Trait Anxiety Inventory for Children

("How I Feel" Questionnaire)

Administration of the State-Trait Anxiety Inventory for Children

The State-Trait Anxiety Inventory for Children (STAIC) is a self-administered questionnaire that can be given individually or to small groups. It is important that the test be referred to by its subtitle, the "How I Feel Questionnaire," and that the subject understand one page is to be responded to according to how he feels at the time and the other page according to how he usually feels. The examiner should read the directions aloud while the children read them silently and then ask if there are any questions. Acceptable responses to questions are, "Answer according to how you feel 'right now'" or "Just answer according to how you 'usually feel.'"

Scoring for the State-Trait Anxiety Inventory for Children

Each item on the STAIC is accompanied by three different choices to which the child is asked to select the one which best describes him. Each choice has a preassigned value of 1, 2, or 3. For the State scale, the statement "I feel" is followed by three adjectives describing various levels of anxiety. In the Trait scale, a statement describing how a person is feeling is given to the child who marks down whether he feels this way "very" much or "not" at all.
Again, each choice has an assigned weight of 1, 2, or 3.
Appendix C

Attitudes toward Disabled Persons Scale

Revised for Children

Form A

Read each sentence and circle the word to show whether you feel each statement is true or false. Remember, this is to see the way you feel. There are no right or wrong answers.

1. Blind or crippled children are usually not friendly. true false

2. Blind or crippled children should not have to compete in school against those children who are not blind or crippled. true false

3. Blind or crippled children get upset more easily than children who are not crippled. true false

4. Most blind or crippled children are more worried about what people think of them than children who are not blind or crippled. true false

5. We should expect just as much from blind or crippled as from children who are not blind or crippled. true false

6. Blind or crippled children are not as good students as children who are not blind or crippled. true false

7. Blind or crippled children do not
usually help their communities very much.

8. Most people who are not blind or crippled would not want to marry anyone who is blind or crippled.

9. Blind or crippled children get as excited about things as other children.

10. Blind or crippled children have their feelings hurt more easily than other children.

11. Totally blind or very crippled children are usually messy.

12. Most blind or crippled children feel that they are as good as other children.

13. The driving test given to a crippled teenager should be harder than the one given to a teenager who is not crippled.

14. Blind or crippled children are usually friendly.

15. Blind or crippled children usually don't worry about getting their work done as much as children who are not blind or crippled.

16. Totally blind or very crippled children probably worry more about getting sick than less blind or crippled children.

17. Most blind or crippled children are not unhappy with themselves.

18. There are more strange children who
are blind or crippled than not blind or crippled.  

19. Most blind or crippled children do not give up easily.  

20. Most blind or crippled children are jealous of physically normal children.  


22. Most blind or crippled children can take care of themselves.  

23. The best thing would be if blind or crippled children would live and go to school with children who are not blind or crippled.  

24. Most blind or crippled children try just as hard as children who are not blind or crippled.  

25. Blind or crippled children feel as good and as important as other children.  

26. Most blind or crippled persons want more love and praise than other people.  

27. Blind or crippled children are often not as smart as children who are not blind or crippled.  

28. Most blind or crippled children are different from children who are not blind or crippled.  

29. Blind or crippled children don’t want you to feel any more pity for them than for other children who are not blind or crippled.
30. The way blind or crippled people behave is annoying.

Form B

Read each sentence and circle the word to show whether you feel each statement is true or false. Remember, this is to see the way you feel. There are no right or wrong answers.

1. Blind and crippled children are usually friendly.

2. Children who are blind or crippled should not have to pay for class trips.

3. Blind or crippled children do not show their feelings as much as children who are not blind or crippled.

4. Blind or crippled children can play the same games as children who are not blind or crippled.

5. Most blind or crippled children get angry easily.

6. Blind or crippled children can be as good students as children who are not blind or crippled.

7. Very few blind or crippled children are ashamed of being blind or crippled.

8. Most children feel uncomfortable when they are around blind or crippled children.

9. Blind or crippled children do not get as excited about things as children who are not blind or crippled.
10. Blind or crippled children do not become upset any more easily than children who are not blind or crippled.

true  false

11. Blind or crippled children are often more shy than other children.

true  false

12. Most blind or crippled children will get married and have children.

true  false

13. Most blind or crippled children do not worry any more than anyone else.

true  false

14. Teachers should not be allowed to punish blind or crippled children.

true  false

15. Blind or crippled children are not as happy as children who are not blind or crippled.

true  false

16. Totally blind or very crippled children are harder to get along with than less blind or crippled children.

true  false

17. Most blind or crippled children expect special treatment.

true  false

18. Blind or crippled children should not expect to live normal lives.

true  false

19. Most blind or crippled children give up easily.

true  false

20. The worst thing that could happen to a child would be for him to be very badly hurt.

true  false

21. Blind or crippled children should not have to compete with children who are not blind or
crippled.

22. Most blind or crippled children do not feel sorry for themselves.

23. Most blind or crippled children do not try as hard as children who are not blind or crippled.

24. Most blind or crippled children prefer to go to school with other blind or crippled children.

25. Blind or crippled children do not feel as good or as important as other children.

26. Most blind or crippled children don't want more love and praise than other children.

27. It would be best if a blind or crippled person would marry another blind or crippled person.

28. Most blind or crippled children do not need special attention.

29. Blind or crippled children want you to feel more pity for them than other children.

30. Most blind or crippled children behave differently than children who are not blind or crippled.

Attitudes toward Disabled Persons

Form 0

Mark each statement in the left margin according to how much you agree or disagree with it. Please mark every one. Write +1, +2, +3, or -1, -2, -3, depending on how you feel in each case.
+3: I agree very much
+2: I agree pretty much
+1: I agree a little
-1: I disagree a little
-2: I disagree pretty much
-3: I disagree very much

1. Parents of disabled children should be less
   strict than other parents.

2. Physically disabled persons are just as intelligent
   as nondisabled ones.

3. Disabled people are usually easier to get along
   with than other people.

4. Most disabled people feel sorry for themselves.

5. Disabled people are the same as anyone else.

6. There shouldn't be special schools for disabled
   children.

7. It would be best for disabled persons to live
   and work in special communities.

8. It is up to the government to take care of
   disabled persons.

9. Most disabled people worry a great deal.

10. Disabled people should not be expected to meet
    the same standards as nondisabled people.

11. Disabled people are as happy as nondisabled
    ones.

12. Severely disabled people are no harder to get
along with those with minor disabilities.

13. It is almost impossible for a disabled person to lead a normal life.

14. You should not expect too much from disabled people.

15. Disabled people tend to keep to themselves much of the time.

16. Disabled people are more easily upset than non-disabled people.

17. Disabled persons cannot have a normal social life.

18. Most disabled people feel that they are not as good as other people.

19. You have to be careful of what you say when you are with disabled people.

20. Disabled people are often grouchy.
Appendix D

Group Guidance Program

Instructions to Group Leaders

Your task will be to facilitate a group guidance experience for children in the upper primary grades. The groups will be approximately 6 to 10 boys and girls ranging from age 10 to 13.

The purpose is not one of self-disclosure, but of teaching understanding of others and interpersonal effectiveness. Your guideline will principally be the "Toward Affective Development" (TAD) program, sections 2 and 3, and the exercises will come from this program. The group will meet two times per week for 5 weeks at Walsingham School during regular school hours. Meetings will be 45 minutes. Though the group is along the lines of a dydactic guidance model, you are reminded of the APGA (American Personnel and Guidance Association) standards of confidentiality, group protection, and leader responsibility.
Meeting Number 1

Begin by introducing yourself and explaining the purpose of the group—to understand how others think and feel and our role in bringing this about. Explain your feelings about being there. Have children introduce themselves with name, grade or age, and stating how they feel now, hoping they have picked up from your earlier modeling.

Following this, have each child name an object they value and relate its history and the feelings associated with it. Or, have each child name his favorite television show, pet, food, et cetera, telling what he likes about it and how he feels about it.

Summarize what happened and terminate.
Meeting Number 2

In this session your emphasis is helping the members recognize and label feelings in themselves and others. Use lessons 54, 59, and 60 from the "Toward Affective Development" kit exactly as they are presented in the manual. You will find that the exercises will take less time than estimated in the manual.

Activity 54 is designed for you to model acceptance of ideas of others, even if they are not similar to yours. In exercise 59, the purpose is to have the children recognize and label feelings common to students in school and follow this with discussions of those feelings. The last exercise, 60, is set up to increase the subject's awareness of positive and negative feelings and help him to increase the number of positive feelings he has.
**Meeting Number 3**

In today's exercises you will assist the children in understanding the role of their body in communicating their feelings to others. Follow lessons 69, 74, and 83 from the TAD manual just as they are presented.
Meeting Number 4

In this group meeting, the student is given experiences in verbal communication of feelings. Not only the content of the verbalization, but the tone of the communication and its effect are looked at. Use lessons 85 and 89 from the TAD manual.
Meeting Number 5

To better help the students understand what has been learned in the previous meetings, this session will focus on role playing in different situations and discussing what each child experienced. Use exercise 96 from the TAD manual as a guide in setting up the role play situations.
1. Ask one of the children to play the role of a "new student" who has entered school in the middle of the year. Instruct the other children to play themselves at lunch, have them sit at a table (the lunch table). The new student is to then ask if he can sit down with them. The old students are to accept him. Then have the children discuss their feelings.

2. Do the same situation with another student and have the children reject the "new student." Discuss.

3. Same situation using another student who has only one arm, and he must ask if someone will help him with his lunch tray. Have children reject the student. Discuss his feelings and those of the children who rejected him.

Next, ask if there were other alternatives the crippled child could have in such a situation and what they are.

Discuss differences and similarities between a child with only one arm and a normal child.
Meeting Number 6

Again, role playing will be used to help the children learn about the effect others have on our feelings and how others might feel in different situations.

Use the first two situations in lesson 96 of the TAD manual as presented. Then, in situation 3, change the circumstances so that Chris is partially paralyzed in one leg and has a limp.

Structure it so that the children are choosing aides for soccer.

Continue with the rest of the situations until time is up, except for situation 8.
Meeting Number 7

Still using lesson 96, resume the role playing situations. After using two or three of the situations, go to situation number 8. However, change it so that Ron is a deaf child. The principal will accept Allen for the job, but tells Ron that his being deaf might cause an accident and it would not be safe to give him the job. Discuss and continue with the other role playing situations until time is up.
Meeting Number 8

The purpose of this meeting is to help strengthen the child's understanding of problems he faces and similar situations faced by others. Use exercise 132 as presented in the TAD manual, in which the children are asked to introduce situations which have presented them with personal problems. They are then to arrive at alternative actions which will help people faced with those situations.
Meeting Number 9

This lesson is to involve the student in group cooperation and to present an experience in prejudice. The meeting will last 90 minutes rather than the usual 50 minutes. Use lessons 97 and 98 from the TAD manual. Each exercise is to last at least 30 minutes. For the first exercise, give blue tags to half of the group (the two groups combined). They will be the "bad" and "stupid" group. The other half will get red tags and will be the "good" and "smart" group. The "goods" will constantly ignore or put down the "bads." After 30 minutes, switch tags and roles for lesson 98.

Discuss feelings as a combined group.
Meeting Number 10

The two groups will be combined again and taken to a wooded area. The children are to be assigned partners and taken for a walk through the woods. On the first walk, one partner is instructed to keep his eyes closed while his partner holds on to him and leads him through the woods. The partners then switch roles and repeat the walk.

Next, one is to close his eyes while the other verbally instructs him on directions and obstacles in his path. Again, the partners switch roles and repeat the experience.

The children are to be returned to the building for a discussion of the experience. Ask each child questions, such as:

1. Which way was easier, being led by touch or voice?
2. Were you afraid of harming yourself at anytime?
3. What were your feelings while walking without looking where you were going?
4. Did you find yourself feeling dependent on your partner?

and so on. This meeting is not to exceed 60 minutes.
Meeting Number II

In order to gain an understanding of the need for adequate feedback in interpersonal communication, do the exercise outlined on pages 339 and 341 of Johnson's (1972) book, Reaching Out. After the group has done each exercise, have the master design passed out to each student for comparison with his own. Then, discuss what feedback is and how it is helpful and how the lack of proper feedback from the environment can be harmful or frustrating. You should also discuss the children's feelings when they could not get sufficient feedback or information, as well as the ways in which they conceptualized the figure before seeing it, and how it differed from their conceptualization.
Appendix E

Group Leaders

Female

Location at Time of Study: Office of Residence Hall Life
College of William and Mary
Williamsburg, Virginia
Date of Birth: October 21, 1942
Education:
1976-present College of William and Mary
Counseling
1970-1974 Indiana University
Indiana, Pennsylvania
Work:
1975-1976 Richmond Public Schools
Richmond, Virginia
Speech Pathologist
1976-present College of William and Mary
Area Coordinator

Male

Location at Time of Study: College of William and Mary
Williamsburg, Virginia
Date of Birth: January 13, 1953
Education:
1976-present College of William and Mary
Williamsburg, Virginia
School Psychology, M.A.
1971-1975 East Carolina University
<table>
<thead>
<tr>
<th>Work:</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenville, North Carolina</td>
<td>1976</td>
</tr>
<tr>
<td>Charles B. Ayco Junior High</td>
<td></td>
</tr>
<tr>
<td>Greenville, North Carolina</td>
<td></td>
</tr>
<tr>
<td>Teacher, Mentally Retarded</td>
<td></td>
</tr>
</tbody>
</table>
REFERENCES
References


Comer, R. C., & Piliavin, J. A. As others see us: Attitudes of physically handicapped and normals toward own and other groups. *Rehabilitation Literature*, 1975, 36(7), 206-221; 225.


VITA

Christopher Raymond Ovide

Birthdate       January 20, 1948
Place of Birth  Hampton, Virginia

Education

Doctor of Education in Counseling at the College of William and Mary, May 1978
Certificate of Advanced Study in Education at the College of William and Mary, May 1977
Master of Science in Rehabilitation Counseling at Virginia Commonwealth University, May 1976
Bachelor of Arts in History at the College of William and Mary, August 1972

Experience