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Attitudes of Special Education Paraprofessionals Toward the Disabled

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ATTITUDES OF SPECIAL EDUCATION PARAPROFESSIONALS
TOWARD THE DISABLED

A Thesis
Presented to the
Department of Counseling and Special Education
and the
Faculty of the Graduate College
University of Nebraska

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
University of Nebraska at Omaha

by
Kathleen H. Wood

May 1986

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Acknowledgements

My sincere thanks are extended to several persons. As thesis committee chairperson, Dr. Sandra K. Squires astutely guided the shaping of this study and was most generous with her forthright encouragement and support.

Dr. John E. Christensen provided the motivation and stimulus for studying paraprofessionals during an earlier association. I appreciate his scholarly advice.

Dr. Patricia Kolasa provided new perspectives in my understanding the research process.

I am also grateful to Dr. Dona M. Kagan for sharing her expertise with the statistical computations.

For my dear husband and children I have new respect. Patience is indeed a virtue.

Partial funding for this study was awarded by the University Committee on Research, University of Nebraska at Omaha.

THESIS ACCEPTANCE

Accepted for the faculty of the Graduate College, University of Nebraska, in partial fulfillment of the requirements for the degree Master of Arts, University of Nebraska at Omaha.

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ABSTRACT

Attitudes of 69 experienced special education paraprofessionals toward disabled persons were assessed using the Attitude Toward Disabled Persons Scale - Form A. A two-tailed t test showed significantly more positive attitudes by subjects compared to the norms. No significant findings resulted from correlational analysis comparing subjects with special education inservice and no inservice and the subject's age, having a handicapped friend or relative, years in special education, years in current placement, educational level of the children served or being a parent.

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CHAPTER I
INTRODUCTION

The passage of Public Law 94-142 and other landmark legislation relating to handicapped children has brought change in appropriate and comprehensive educational service for exceptional children. As a result of the mandated changes much research has been undertaken investigating the attitudes of persons affected by this change (Donaldson, 1980; Hannah & Pliner, 1983; Schneider & Anderson, 1980). Towner (1984) cites attitudes studied in populations including non-handicapped students and adults, handicapped students and adults, teachers of the handicapped, regular education teachers of the handicapped, regular education teachers, administrators and parents, community groups and college students. Of forty-seven attitude studies cited, only one utilized subjects termed paraprofessionals (Felton, 1975) in the field of health care.

The educational paraprofessional population may include persons who are volunteers, peer teachers and teacher aides. For the purposes of this study, the term paraprofessional shall mean the individual who is a paid employee serving in an adjunctive role to the certified teacher. The specific paraprofessional population of concern was that group of people having direct contact with exceptional children. The term paraprofessional may be interchangeably used with the word aide or teacher aide keeping in mind that the reference is in regard to special education personnel. Unlike the educational aide in a regular education

setting, paraprofessionals in special education are in circumstances of direct supervised instruction with exceptional children approximately 60 percent of their paid time (Vasa, Steckelberg, & Ronning, 1982).

Background of the Problem

Attitudes are a matter of concern. They come into direct focus and are a vital part of a person's interacting with another object.

According to Fishbein and Ajzen (1975) attitudes are an individual's inclination to evaluate an object either favorably or unfavorably.

Attitudes can appear in the form of verbal expression or in the form of non-verbal communication and include a cognitive component made up of beliefs, of an affective component involving favorable or unfavorable feelings, and a behavioral component relating to a specific subject (Baron & Byrne, 1981). Attitudes may be learned through classical conditioning, through observation, or through instrumental conditioning working independently or together.

Within the special education setting, teachers and their paraprofessional staff members are the persons who have direct contact with the exceptional children they serve. The attitudes that they hold may have direct bearing on the learning success or failure of those children. Researchers have noted that favorable attitudes towards these children will positively affect their functioning while negative attitudes will lead to further difficulties (Hannah & Pliner, 1983; Johnson and Johnson, 1984).

Statement of the Problem

It appears, then, that attitudes are an important variable in the education of special needs children. Identification of both positive

and negative attitudes towards handicapped persons has been investigated by many (Donaldson, 1980; Hannah & Pliner, 1983; Towner, 1984). Because of the increasing use of paraprofessionals within special education settings (Vasa, Steckelberg & Ronning, 1982), it has become increasingly important to consider the attitudes held by these adults with whom the exceptional child has contact.

Because of the mainstreaming issue, much has been developed in the way of preservice and inservice training to help prepare those directly concerned (Hartle et al., 1980; Leyser & Abrams, 1983; Warger & Trippe, 1982). Within the context of these preservice or inservice training programs, attitude objectives are often mentioned, indicating what seems to be a real concern for the impact that attitudes may have on behavior towards special children. In this study the term preservice/inservice training was defined as to include college courses, staff development programs, educational workshops, conferences, mini-courses, seminars, institutes, lectures, and help sessions. The word "inservice" shall be used throughout this study to mean a broad range of preservice or inservice training.

The personal qualities of these special education aides has been stressed (Kaplan, 1980; Vasa, Steckelberg & Ronning, 1982) as being an important qualification. Kaplan also points out that the expressed need for paraprofessionals to have desirable personal qualities as well as experience becomes an issue for the selection of persons to hold these aiding positions.

Purpose of the Study

Certain investigative assumptions about attitudes have been made by

the adult educational community surrounding exceptional children (Jones & Guskin, 1984). One assumption is that handicapped persons are rejected by persons who hold negative attitudes towards them. A related assumption that they cite is that lack of information or inexperience suggests that an individual has negative attitudes towards an object, in this case, handicapped children. The role of special education paraprofessionals takes them into increasing contact with handicapped children.

Increasing costs of programming, shortages of qualified personnel in rural areas, and the need for more individualized programming have contributed to greater utilization of paraprofessionals in special education programs.

(Vasa, Steckelberg & Ronning, 1983, p. 1)

It is important to gain insight into or about paraprofessionals' attitudes toward this special population of people, especially since investigators feel that attitude and expectancy may have powerful effects on the handicapped (Hannah & Pliner, 1983; Rosenthal & Jacobson, 1968).

The purpose of this study is to determine if paraprofessionals within a special education setting who have experience that includes special education inservice training differ in attitudes toward disabled persons from paraprofessionals who have had experience but have not had special education inservice training.

The research question to be answered then is: Will special education paraprofessionals who have three or more years of experience in a special education setting and who have had formal special education inservice training show a difference in attitudes as compared to established norms for nondisabled persons and compared to special

education paraprofessionals who have had three or more years of special education experience but have had no formal special education inservice training?

Theoretical Framework

According to Katz (1960), the study of attitudes may be divided into two general areas of thought. One stream of thought holds that people have limited powers of reasoning and reflection, discriminate weakly, have limited self-insight and short memory. Emotional forces are assumed to be the controlling factors. The use of subliminal suggestion is an example of this tradition of thought. The second stream of thought holds that people are rational. Understanding the world around him and consistency are what we seek to learn. Reasoning power helps people discriminate. This line of thinking heavily relies on the idea of the importance of adequate information. Two-way communication and the exchange of ideas are an indication of this belief that intelligence and comprehension are important in forming and/or changing opinions, beliefs and attitudes. Our system of education is based on this rational model.

Attitude change theories may be grouped into three categories:

1. information-processing theories
2. consistency theories and
3. functional theories (Watts, 1984).

All theories set forth to explain the nature of attitudes and to prove certain concepts or models to guide research.

The functional approach by Katz (1960) is addressed in this study. Katz explains that in order to understand attitudes one must look at the motivational basis for holding attitudes and to see what function

attitudes perform. Katz presents four function groups;

1. the instrumental, adjustive, or utilitarian function
2. the ego-defensive function
3. the value-expressive function
4. the knowledge function.

(p. 170)

The instrumental, adjustive, or utilitarian function of attitudes helps a person to make adjustments in maximizing rewards and minimizing penalties. The ego-defense function serves as a protection for one's self-esteem. The value-expressive function provides an individual a way to express fundamental values important to a person's own beliefs and self-image. The knowledge function serves to provide meaning and understanding to the world's complexities by organizing environmental stimuli (Katz, 1960).

Relating this, then, to the inservice training of paraprofessionals, one can see why the issue of attitude is addressed in so many training programs for educationally based adults (Finnell et al., 1980; Gillis-Olion & Olion, 1984; Hartle et al., 1980; Iverson & Davis, 1980; Warger & Trippe, 1982; Wieters, 1972). This author assumes that the providing of information is an attempt to stimulate the cognitive elements that serve the knowledge function and that potentially lead to attitude change. This study accessed attitudes of two groups of paraprofessionals, and whether between those two groups special education inservice training had indeed affected a difference in attitudes.

Hypotheses

The hypotheses to be tested in this study are:

1. that the mean scores of special education paraprofessionals

will be different from the mean scores of the norms for female nondisabled persons at the .05 level of significance on Form A of the Attitude Toward Disabled Persons Scale.

2. that special education paraprofessionals who have had special education inservice training will show a difference in attitudes towards the disabled as compared to special education paraprofessionals who have not had special education inservice training at the .05 level of significance.

Limitations of the Study

This research study was bound by certain limitations. Randomly selected subjects were chosen from a midwestern city exclusive of any outstate, rural subjects or subjects from any other state or nation. One major limitation which limits generalizations is to be found in the fact that the sample selection was based on self-reported information as was the assessment itself.

The demographic data collection required the subject to accurately report attended inservice and or preservice experiences which also was limited by nature of the self-reporting. Careful consideration was given to the format for reporting this inservice training information in the hope that subjects were able to distinguish between types of inservices. Also, the use of varied special education inservice training, regardless of the type, presenter, objectives, goals, duration or approach is a limitation because of the unknown nature of its effects on individuals and the uniqueness of any given training session.

The use of subjects having a minimum of three years of experience

in a special education setting does not control for the impact of several more years of experience.

Only one attitudinal measure was used. Had other instruments been utilized the possibility of more variant findings may have resulted.

CHAPTER II

REVIEW OF LITERATURE

This chapter includes an overview of some of the current research and reports that have been conducted on attitudes. This is in no way a complete examination of the related literature but an attempt is made to include information sufficient to gain an understanding of this area of study.

Three journal articles reported in the early 1980s review attitude studies emphasizing different aspects of attitude research. The first was a review intending to aid rehabilitation counselors. Schneider and Anderson (1980) concentrated on the review of research that dealt with factors which seemed to influence a person's perception of the stigma associated with certain handicapping conditions as well as factors associated with attitude change. They found a revealed trend in the research showing studies intending to produce positive attitudes toward certain handicapping stigma. Successes were reported. These attitude changes were shown to be stimulated by direct contact with the handicapped and by the provision of information.

The second review article by Pederson and Carlson (1981) reported studies concerning attitudes of rehabilitation service workers.

Specifically they looked at investigations concerning:

- a. attitudes toward disabled
- b. correlates of attitudes
- c. attitude change
- d. attitude and outcome
- e. attitudes toward other team members.

(p. 277)

Overall, these authors encouraged further research because of findings which revealed design and sampling errors.

The third review article looked at research that investigated common factors in successful interventions for modifying attitudes toward the handicapped (Donaldson, 1980). Reviewed were studies using exposure and contact as treatments; some reporting success in favorable attitude change toward the disabled; some reporting negative effects to such treatment. Other treatments utilized in studies included information and persuasion, analysis of the psychodynamics concerning prejudice, simulation of disability and group discussion techniques. Donaldson pointed out that much of the research failed to test theoretical assumptions with only a few exceptions. However, that author suggested that the review indicated the usefulness of planned experiences for attitude modification toward the physically disabled. A suggestion was made that preservice and inservice training of teachers should include planned exposure to the disabled because it appeared to be the best method of attitude modification.

An increase in the negative attitudes of college students after an informational treatment was reported by Hafer and Narcus (1979) although these negative attitudes did not maintain over time. An earlier study (Effron & Effron, 1968) that focused on the development of a measurement scale, sampled college student and teacher attitudes in an attempt to discover the multidimensional aspects of attitudes toward mentally retarded persons. The researchers found that the teachers of the mentally retarded were less authoritarian and more favorable towards desegregation. Like Donaldson, they reported more favorable attitudes

occurred with persons having contact, in this case, with the mentally retarded.

Another aspect of attitude investigations considers a hierarchy of commonalities that exists among exceptionalities (Jones, 1974). A social distance questionnaire was employed and 264 college students responded to certain interpersonal situations. General factors were revealed concerning attitudes toward the handicapped and was then further narrowed into attitudes toward the psychologically disabled and toward the mildly retarded--nonexceptional. Support was found for attitudes appearing as a hierarchy because of these commonalities rather than as a categorical classification or label. In a similar vein, Antonak (1980) suggested another nonlinear and multidimensional hierarchy of attitudes and researched multiple facets that may predispose one towards certain behavior regarding exceptionalities. This study proposed that ordering theory for analysis of data may help in studies looking at the complex relationship between or among attitudes toward the handicapped and suggested that certain displayed patterns have theoretical significance.

The remainder of the research reviewed here consists of research that may be grouped into three categories. The first group concerns studies investigating attitudes held by certain populations. The second is concerned with the effects of contact and knowledge in affecting attitude change and the third group is centered on research concerning inservice training and its effects on certain subjects.

Attitudes of Specific Populations

Directing this review, then, to this first group of studies, one

group of investigators compared the attitudes of educators from institutional settings with educators from public schools (Green, Kappes, & Parish, 1979). Voluntary subjects, termed educators, consisted of teachers, aides and ancillary personnel. The findings, collected by means of the Personal Attribute Inventory, suggested that as a whole, educators seem to have negative attitudes toward special education children regardless of work setting. Utilizing a social distance scale, another study directed its investigations towards negative stereotypes of the mentally retarded (Gottlieb, 1974). Findings indicated that the randomly selected fourth grade subjects seemed to be more influenced by a mentally retarded child's academic competence than by the actual retardation label. Silver, Lubin, & Silverman (1984) examined attitudes and job satisfaction of direct care personnel of the severely and profoundly mentally retarded versus personnel in large residential settings. They found no attitude differences between these two groups of personnel. They hypothesized that greater frustration and staff dissatisfaction for those working with the more severely disabled result in more negative attitudes. This, however, was not supported by their findings.

Skrtic, Sigler and Lazar (1978) investigated the attitudes of teachers of the trainable mentally retarded. Comparing scores from the Attitude Towards Handicapped Individuals Scale (a slightly modified version of the Attitude Toward Disabled Persons Scale) they found no significant difference in attitudes held by male versus female teachers. This is in contrast to several studies reviewed by Yuker, Block and Youngg (1966) that found females to have more favorable

attitudes toward the disabled. Yuker et al. also reported studies where no significant sex difference was found.

Stone (1980) researched teacher's attitudes; in particular, certain attitudinal indicators. These indicators included several factors: "...preparation, sympathy, communication, sense of ease, awareness of restrictions, appeal of teaching handicapped students, and ability to help them learn" (p. 6). Attitudes directed toward specific handicapping conditions was also investigated. A semantic differential was used. Generally, findings suggested that negative attitudes were found to be related to inexperience and youth while positive attitudes appear to have been related to experience and age.

Effects of Contact and Knowledge

The second group of research studies investigated the effects of contact with handicapped persons and the effects of knowledge concerning handicapped persons. Contact, in these investigations, refers to some type of interaction between a nondisabled person and a disabled person. The term knowledge refers to the education or information a person has received regarding a certain subject--in these cases, the subject is a handicapped person.

Yuker (1977) suggested that there are certain characteristics of contact situations that are responsible for the effects of interactional contact. They include:

1. frequency of contact
2. status
3. type of interaction
4. intimacy
5. societal and institutional norms
6. setting
7. perceived normality.

(p. 100)

The favorable interaction between these characteristics produced a greater likelihood of positive attitudes.

In support of the idea that frequency of contact leads to more favorable attitudes, Felton (1975) reported that seven child health care paraprofessionals in training did indicate more favorable attitudes toward the disabled following a training program that provided extensive, direct exposure to disabled children. Another study investigating the issue of interaction and type of intimacy found that contact alone did not affect attitudes held by college students toward the disabled but did find support for the hypothesis that structure of social interactions will lead to positive attitudes held by nonhandicapped persons (Evans, 1976). The study set up experimental manipulations by way of statements made by a blind college student (a peer) to the college students. Yunker's contact characteristic of status may have been in effect, here, as well.

An investigation concerning attitudinal dimensions (Gottlieb & Corman, 1975) utilized questionnaires to explore the effects of sex, age, education and contact with a mentally retarded individual. A Likert format was used as well as sixteen semantic differential pairs. Among numerous findings, the relationship between contact and higher education was positively correlated to persons regarding segregation of the mentally retarded. It was also found that school integration was not significantly related to interactional contact. The extent of contact was also studied by correlation of factors in an order of hierarchy regarding intimacy but no significant findings were reported for this relationship.

A project that studied demographic and experiential variables (Conine, 1969) concerning teachers' attitudes found that female teachers did indicate more positive attitudes toward the disabled on the Attitude Toward Disabled Persons - Form O. They did not find significant differences for a number of other relationships between certain variables, including race, religion, relationship with handicapped persons, amount or type of contact with a disabled person, type of specialized education for teachers, and teachers' exposure "to formal educational experiences related to disabled persons and those without such exposure" (p. 280). This study suggested then that teachers hold attitudes toward the disabled that are similar to the general public which suggested that negative attitudes of the general public may "reflect the reactions of prejudiced school teachers" (p. 280). Conine suggested that attitude change be directed toward the affective element rather than the cognitive element of attitudes.

This last study involving the issue of contact, measured heart rate and skin conduction of college students viewing scenes of persons who were physically disabled, physically normal and neutral scenery (Wesolowski & Deichmann, 1980). It was reported that skin conduction did work as a measure of reaction to the viewings while heart rate did not show itself to be a measure of reaction.

Many studies directed their attention to the issue of education and information, that is, knowledge, as being an effective stimulus for attitude change and it was usually assumed that additional knowledge would have positive effects on attitudes. Yuker (1977) suggested that this is not automatically true. However, when information did lead to

positive attitudes, he suggested four factors that had an influence:

- 1) the content of the message and the medium through which it is presented;
- 2) the source of the communication;
- 3) the characteristics of the person who receives the communication; and
- 4) the behavior engaged in by the person who receives the communication.

(p. 98)

Jordan and Proctor (1969) conducted a study to look at attitudes of certain groups of teachers towards placement of special education students. They found that increased knowledge did not lead to positive attitudes. Teaching experience and its relationship to knowledge of handicapping conditions was also pursued in regard to teachers' attitudes. "Realistic" acceptance and knowledge were measured by inventories and four variables were selected as predictors. They included: "(1) type of teaching contacts, (2) amount of teaching experience, (3) amount of academic credit, and (4) type of consultation experience" (p. 436). It was found that although teachers specifically trained in special education had more knowledge of handicapping conditions they did not display more "realistic" attitudes in regard to mainstreaming. Academic study was the only variable to be a significant predictor of both inventory scores.

In using subjects from an introductory level special education course, pre- and post-tests were administered to college students (Attitude Toward Handicapped Individuals Scale) to determine attitude change (Drake, 1977). Two of three groups of subjects showed a significant difference in pre- and post-test scores indicating more positive attitudes following the semester course.

Attempting to separate attitude change from knowledge, children

from two elementary schools were measured by means of two scales-- Experience with Handicapped Persons Scale and Children's Knowledge About Handicapped Persons Scale (Hazzard, 1983). The aim of this study was to collect normative data regarding disability-related knowledge and affect, to determine their relationship and to look for relationships between knowledge, affect and certain characteristics of children (age, sex and previous contact with the disabled). The findings suggested a positive but not a high correlation between the affective and cognitive attitudinal dimensions. Knowledge did not correlate with contact and the aspect of sex was not significant. However, age proved to be highly correlated. The authors thought that this information may be valuable for persons directing handicapped awareness programs for focusing treatment and assessing results. The findings on the social distance ratings were not related to age--a contrast to the knowledge findings-- but were found to have a positive relationship to contact and sex. Females gave more positive social distance ratings than boys. This study suggested that the finding may be related to sex-role expectations, in that nurturing is a highly feminine quality and that nurturing may lead to more accepting attitudes.

In summary, both contact and knowledge have been found in varying relationships with attitudes toward the disabled. Certain characteristics and factors have been discussed which some researchers feel account for favorable effects. Contact alone did not lead to more favorable attitudes held by college students and contact and higher education were positively correlated to certain subjects' attitudes toward the mentally retarded. No significant findings were reported

relating factors in a hierarchy, to intimate contact or to certain demographic variables and formal educational experiences. Knowledge did not lead to the positive attitudes of teachers regarding educational placement but that knowledge in a college course format did positively affect the attitudes of the enrollees. Children's knowledge of handicapped persons was not found to be related to contact or sex but it was found to be related to age. Contact and knowledge may have positive effects on attitudes but the issues are complex.

Yuker (1977) has suggested that certain conclusions may be drawn from the resulting data reported in attitude studies. Attitudes held by those persons who have interactions with the disabled are no different from the attitudes held by the general public. Secondly, the resulting effects of education and contact with the handicapped may be attributed to the data suggesting that attitudes of groups are as variable as attitudes of the general public. Thirdly, persons in different work categories who have differing educational and contact experiences have evidenced different attitudes toward the disabled. The available research concerning preservice or inservice training leads one to conclude that there has been a general assumption that attitudes of persons who are involved with the handicapped are important and may have long-ranging effects. The training oftentimes specifies objectives geared towards attitudes.

Inservice Training

A major stimulus for the development of training programs emphasizing attitudes comes from the enactment of PL 94-142 and the resultant mainstreaming issue (Archibald, 1978; Carroll & Purdy, 1978;

Ford & Stjernberg, 1979; Murray & Beckstead, 1982). Warger & Trippe (1982) directed their investigation towards the importance of assessing preservice needs. They felt that having an understanding of student teachers' fears and anxieties toward special students in regular classrooms would help in the development of preparatory coursework providing "experiences to develop values, information, and skills appropriate to the situation" (p. 246). The students responded in reference to the specific handicapping condition labeled emotional impairment. Investigations via questionnaires found that the greatest possible increase in attitudes would come from a positive change in the cognitive aspect of attitude. They concluded that the behavioral and affective areas have greater possibilities for promising change and they suggested that focusing efforts solely at the cognitive component excluding affective and behavioral areas might not lead to positive attitudes.

To determine a method of inservice education to reduce apprehension of vocational educators for working with physically disabled students, one study used the Attitude Toward Disabled Persons Scale - Form A to find that there was a significant increase in more favorable attitudes following inservice training (Iverson & Davis, 1980). These researchers remarked, "although attitudes are not the sole determinant of behavior, perceptions and beliefs are reflected in attitudes, and attitudes are an important part of any educational environment" (p. 6).

A study designed to evaluate the success of a preservice training program in the attitude change of teacher trainees, used the Attitude Toward Disabled Persons Scale - Form O as a post-test (Leyser & Abrams,

1983). The three year training program treatment emphasized skills, knowledge and certain competencies to better enable a prospective teacher success with mainstreamed students. Barring the fact that a pre-test was not given, the authors suggest that findings on the post-test support that preservice training helped to promote more positive attitudes toward the disabled. They found similar positive attitudes in both the Elementary Education majors where mainstreaming was emphasized and their group of Special Education majors. The authors speculated that more knowledge regarding mainstreaming, available instructional material and contact with the disabled were factors that strengthened positive attitudes. A question was raised regarding maintenance of positive attitudes over time and if positive attitudes would actually translate into positive behavior.

Focusing on attitudinal barriers, regular education personnel were provided with knowledge and techniques to help make mainstreaming successful (Finnell, Nathanson & Lambert, 1980). Training modules in seminar format were found to stimulate significantly more favorable attitudes as measured by the Attitude Toward Handicapped Individuals Scale. The use of contact with the disabled, nonverbal communication techniques, role playing, and a social distance exercise helped in the stimulation of these favorable attitudes.

One of the major goals of a three-year inservice program was to focus on the development of positive attitudes towards working with disabled children in paraprofessionals, regular education teachers and early childhood teachers (Gillis-Olson & Olson, 1984). The import of positive attitudes by all personnel directly involved with handicapped

children becomes apparent when a program such as this gears one third of its training time to attitude change.

A similar training program (Hartle et al., 1980) listed objectives related to attitude change for each group of staff involved in the mainstreaming issue although how the attitude change would be measured is not stated. Teachers of the preschool handicapped, administrators, classroom teachers and aides were included in the training. Specific handicapping conditions that were addressed encompassed visual impairment, hearing impairment, the educable mentally handicapped, the learning disabled and the speech impaired.

Along with the research on inservice or preservice training programs for mainstreaming success with teachers and ancillary personnel a number of publications mentioned the needs of the paraprofessional population. These writings support the idea that the demands of working with special needs children require a certain special kind of person and that the attitudes of these people could, indeed, be shaped. Langlo (1977) cited in Kaplan (1980) remarked:

The stress that teachers place on personal qualities in assistants, or 'getting the person who is right for us' strongly suggests that on-the-job training ought to go hand in hand with any formal preparation of assistants in a taught course. Informal assessment of experience and personal qualities should count heavily in selecting candidates for training courses and in recruiting assistants to schools.

(p. 14)

The need for increased utilization and training of paraprofessionals in special education for the enhancement of effective special needs programs was expressed by many (Blessing, 1967; Gartner, Jackson & Riessman, 1977; Lombardo, 1980). Attitudes are addressed

either directly or indirectly. In a Nebraska survey of administrators and teachers, Vasa et al. (1982) found that the attitudes that paraprofessionals hold toward handicapped children is the criteria most often cited for the selection of special education paraprofessional staff members. This group also prepared an extensive guidebook aimed at legal issues, roles and a chapter on the ways to plan and coordinate a paraprofessional program in special education for the State of Nebraska (Vasa, Steckelberg & Ronning, 1983). Others have developed training modules addressing similar aspects of training special education aides. Lombardo (1980) presented characteristics and guidelines for paraprofessionals with children having specific disabilities. One training program within a summer camp setting explored both attitudes and feelings in the paraprofessional participants (Garrett & Hastings, 1974). Another manual for aide training to work with the mentally retarded developed twelve instructional units including a portion that looked at trainee attitude (Weiters, 1972).

One researcher looked at the effects of a developed training module on changing the attitudes of 24 college students. Results indicated more favorable attitudes following the training course (Thiel, 1984). The Attitude Toward Disabled Persons Scale - Forms A and B were used as the measure of attitude change.

Further evidence of the extent and use of paraprofessionals was presented by Faford (1975) in an extensive literature review while others provided bibliographies that presented resources in readings, training materials and programs aimed at the paraprofessional in special education (Steckelberg, Vasa & Jones, 1984; Pickett & Humm, 1980).

It is apparent that the paraprofessional is a reality within the educational environment of the special needs child. Laws and policies direct the improvement of services for the handicapped. This implementation cannot occur without the increasing receptivity toward the handicapped as distinctively different persons (Jones & Guskin, 1984). Attitudes matter and their significance has drawn the attention of authors and researchers.

CHAPTER III

METHODOLOGY

This chapter contains a description of the research methodology employed in this study. The methodology includes a description of the research approach, a discussion of the assessment tool, a description of sample selection and administration of the scale. The last section addresses the coding and analysis of the data.

Research Approach

In an attempt to look at learned attitudes an assumption was made that a certain population of nondisabled persons (paraprofessionals in special education) acquired those attitudes within experiential contexts. The attitude of those persons could then be considered to be a function of their experiences in the past (Yuker, Block & Youngg, 1966). That experience would have included contact with the disabled and specific additional educational experience concerning disabled persons. The additional educational experience addressed in this study was the area of formal inservice training. (The word inservice was used throughout this study as including any preservice or inservice training including college courses, staff development programs, workshops, conferences, mini-courses, seminars, institutes, lectures and help sessions.)

A two-group single observation study was conducted. Experience in special education settings was held constant at three or more years. Independent variables included age, years in a special education placement, years in current placement, being a parent, having a

handicapped relative or friend, and special education inservice training. The dependent variable was the test score on the Attitude Toward Disabled Persons Scale - Form A (Yuker, Block & Youngg, 1966). For the purposes of statistical analysis the null hypotheses tested were:

(1) that the mean scores of special education paraprofessionals will be no different than the mean score of the norms for female nondisabled persons (Yuker et al. 1966) at the .05 level of significance on Form A of the Attitude Toward Disabled Persons Scale.

(2) that special education paraprofessionals who have had special educational inservice training will show no difference in attitudes towards the disabled as compared to special education paraprofessionals who have not had formal special educational inservice training at the .05 level of significance.

The Assessment Tool

The instrument utilized for collecting the data was the Attitude Toward Disabled Persons Scale - Form A (Yuker, Block & Youngg, 1966). It is a 6 point Likert-type scale consisting of 30 statements concerning the disabled. Each of the 30 statements suggests that the disabled are either the same as or different from the nondisabled in personality or need for special consideration in social relationships. The agreement or the disagreement with each statement suggests an emotional difference between nondisabled and disabled persons. A subject showing a relatively low score on this scale is indicating the view that disabled persons are different from normal persons. These are interpreted as suggesting negative attitudes. A subject showing a relatively high

score is indicating a view that the disabled are the same as nondisabled persons and suggesting positive attitudes. The Attitude Toward Disabled Persons Scale - Form A (ATDP-A) takes approximately 10 minutes to administer. Responses are weighted appropriately and added algebraically for scoring. "Split-half reliabilities range from .78 ($N=72$) to .84 ($N=110$). Coefficients of equivalence (Form A versus Form B) ranged from .41 ($N=58$) to .83 ($N=57$)" (Shaw & Wright, 1967, p. 481).

The validity of the Attitude Toward Disabled Persons Scale, when used with nondisabled people as in this study, was reported by the authors of the scale to show a reciprocal relationship with measures of prejudice and some other variables relating to attitudes of prejudice (Yuker, Block & Youngg, 1966). They reported validity of their assessment to be based on construct validity. It was not anticipated that high levels of probability would be found for their hypotheses because of the complex nature of the dependent variables but they did expect to observe "certain predictable relationships."

By observing whether the correlations were significantly different from zero and in the direction predicted on the basis of theoretical considerations of attitudes toward the disabled, it was possible to indicate the adequacy of the measuring instrument.

(p. 35)

Validity has also been reported to correlate with semantic differential scores, a scale of job satisfaction and The Edwards Personal Preference Schedule (Shaw & Wright, 1967).

Some conflicting evidence has appeared concerning the fakeability of this measure. The author of the scale, Yuker (1966) reported the Attitude Toward Disabled Persons Scale to be relatively nonfakeable in

a study using psychology students who took the test under two different conditions. It was found in the study that students could distort scores but the difference between the two means was not significant. Yuker suggested then that the scale "is not particularly fakeable" (p. 36) because the subjects could not make responses to align with the key for scoring in order to earn a higher score. In contrast to these findings Vargo and Semple (1984) used a one-tailed t test and found that the Attitude Toward Disabled Persons Scale could be faked by college students in the field of physical therapy. These researchers remarked that as a result of their findings they did not recommend using this scale as a criteria for admissions selection for physical therapy students.

Sample Selection

Paraprofessionals ($N=261$) employed in special education settings from preschool through high school were chosen as participants. These paraprofessionals served 20 percent of the special needs children in the state of Nebraska (Nebraska Department of Education, 1986). No vocational, parochial or special private school paraprofessionals were utilized. Subjects were employed within the metropolitan area of Omaha, Nebraska. Represented were special education paraprofessionals employed in both large and small schools who were randomly selected from the pool of special education paraprofessionals responding to the demographic information data sheet.

Permission to use their employees as subjects was secured from the district heads of special education in the cooperating school districts. Two hundred sixty-one special education aides were sent a

cover letter (Appendix) and a coded demographic information sheet (Appendix) with a return envelope. One hundred eighty-two (69.7 percent) of the demographic sheets were returned. Fifty paraprofessionals were eliminated because they did not have the required three or more years of experience in special education settings. Three other subjects returned the demographic sheet beyond the date to be included in the study. The remaining 129 subjects were separated into two groups based on their self-report of having or not having participated in special education inservice training. From the 129, two groups of 36 subjects each were randomly selected. Group 1 ($n=36$) subjects were randomly selected from the "with" preservice/in-service pool. Group 2 ($n=36$) subjects consisted of all of those who reported no inservice training in special education. All subjects ($N=72$) were sent a cover letter (Appendix) and the ATDP-A. A reminder note was sent to those who did not return the scale after ten days. The return rate was 95.7 percent (35S, in Group 1; 34S, in Group 2).

All subjects but one were female; 88 percent were parents; 32 percent reported having a handicapped relative or friend; and 74 percent were between the ages of 35 and 64.

Coding and Analysis of the Data

Upon receipt of the completed scales, each return was coded. An important assumption was made here that the subjects were able to accurately report their inservice training experience on the demographic cover sheet. The assessments were then scored for each group and the mean scores were determined. A t test of the two independent samples

was made comparing the two groups. Correlations between the Attitude Toward Disabled Persons Scale - Form A and age, having a handicapped friend or relative, years in special education, years in current placement, educational level of the children served and being a parent were computed.

CHAPTER IV

RESULTS

Employing the Attitude Toward Disabled Persons Scale - Form A to measure attitudes of special education paraprofessionals, scores were obtained to test the following hypotheses. Statistical analyses of the scores are reported in reference to each hypothesis.

Hypotheses Restatement

Null hypothesis 1. The mean scores of special education paraprofessionals will be no different than the mean scores of the norms for female nondisabled persons at the .05 level of significance on the ATDP-A.

Alternate hypothesis 1. The mean scores of special education paraprofessionals will be different from the mean scores of the norms for female nondisabled persons at the .05 level of significance on the ATDP-A.

Null hypothesis 2. Special education paraprofessionals who have had special education inservice training will show no difference in attitudes toward the disabled as compared to special education paraprofessionals who have not had formal special education inservice training at the .05 level of significance.

Alternate hypothesis 2. Special education paraprofessionals who have had special education inservice training will show a difference in attitudes towards the disabled as compared to special education paraprofessionals who have not had special education inservice training at the .05 level of significance.

Findings

The results did not support null hypothesis 1 but did support alternate hypothesis 1. The overall mean scores of all special education paraprofessionals ($N=69$) were significantly more positive ($p<.02$) than the mean scores of the norms for female nondisabled persons on the ATDP-A. Group 1 ($n=35$, with inservice) mean scores did not show a significant difference compared to the mean score for the norms. Conversely, Group 2 ($n=34$, no inservice) mean scores did show significantly more positive attitudes ($p<.01$), compared to the mean score of the norms (Table I).

The results did not refute null hypothesis 2, therefore, providing no evidence to support alternate hypothesis 2. No significant difference was found between the two groups in their attitudes toward disabled persons as measured by the ATDP-A. For the purposes of this study, the female norms were used. However, one member in the sample was male. A comparison was made including the male subject score and excluding his score on the t test. No significant difference occurred and the subject was retained to maintain sample size.

Other Tests

To test for any significant relationships, Pearson correlations were run between the ATDP-A scores and a series of correlates taken from the subject demographic sheet. These variables were age, having a handicapped friend or relative, number of years in special education, number of years in current placement, education level of the children served and whether subjects were parents. Results are presented in Table II. None were significant.

TABLE I

Comparisons of Subjects with ADTP-Form A Norms
for Female, Nondisabled

	N	M	SD	t	P
Female, Non Disabled	405	114.2	20.48	-	-
All subjects	69	120.9	19.68	2.61	<.02*
Group 1 (with inservice)	35	118.4	20.45	1.17	<.2
Group 2 (no inservice)	34	123.5	18.22	2.84	<.01**

* $p < .02 > .01$
** $p < .01 > .001$

TABLE II
Correlations with ATDP-A

Correlates	Group 1 (with inservice) <u>n</u> = 35		Group 2 (no inservice) <u>n</u> =34	
	Correlation	<u>P</u>	Correlation	<u>P</u>
Age	0.0341	.423	-0.0615	.365
Handicapped friend or relative	0.2058	.118	0.0294	.434
Years in special education	0.0543	.378	-0.0817	.323
Years in current placement	0.2541	.070	-0.0017	.496
Level of children served	-0.1763	.155	-0.1062	.275
Parent	0.1510	.193	0.1027	.282

The range of the ATDP-A scores differed considerably for the two groups. The scores of the group with inservice ranged 92 points with 68 as a low score and 160 as a high score, (mean=118.4; sd=20.45; median=122; mode=130). The scores of the group with no inservice ranged 64 points (89-153; mean=123.5; sd=18.22; median=122; mode=118).

Other Findings

Nearly one third (n=22) of the total group of paraprofessionals submitted some type of unsolicited written or verbal comment regarding the ATDP-A scale. This was despite the fact that neither space nor a comment section was provided. Of the inservice group, 37.2 percent (n=13) submitted remarks and of the no inservice group 26.5 percent (n=9) submitted remarks.

The demographic information sheet requested data regarding types of inservice training in which the subjects participated. Of the total group of paraprofessionals, 29 (42 percent) reported having taken general college courses but not in special education. Of the inservice group, the number was 17 (48.6 percent). Of the group with no inservice, the number was 12 (35.3 percent). The inservice group reported seizure management and "other special education topics" as the most commonly reported inservice sessions. The no inservice group reported general college courses not in special education as their most frequently reported training. See Table III for a summary of the inservice training topics.

Summary of Results

The Attitude Toward Disabled Persons Scale (Yuker, Block & Youngg, 1966) was used to measure attitudes of 69 special education

paraprofessionals. Two groups were formed on the basis of participation in special education inservice training. The group with no special education inservice had significantly more positive attitudes compared to the norms for female nondisabled (Yuker et al., 1966). The group with special education inservice training had positive attitudes but not significantly more positive than the norms. All subjects displayed significantly more positive attitudes than the female nondisabled norms. Correlations were computed comparing the two groups and the correlates age, having a handicapped friend or relative, years in special education, years in current placement, educational level of the children served and being a parent. No significant findings resulted. Regroupings and comparison to the same correlates yielded no significant findings. Comments by subjects indicated a general confusion as to the word "disabled". Demographic information collected showed college courses as the most attended type of inservice training for all subjects and specific special education topics to be the most attended special education inservice category for Group 1 subjects.

TABLE III
Inservice Training Topics

Training	% All Subjects Rank (N=69)	% Group 1 Rank (n ₁ =35)	% Group 2 Rank (n ₂ =34)
Had general college courses	42.0 1	48.6 2	35.3 1
Specific special education topics	40.6 2	80.0 1	N.A. -
Educational subject matter not in special education	30.4 3	40.0 4	20.6 2
Concerning seizure management and/or health issues of handicapped children	23.2 4	45.7 3	N.A. -
Personal Health and Wellness	20.3 5	31.4 5	8.8 5
Concerning mainstreaming of handicapped children	15.9 6	31.4 5	15.9 3
Using computers in general education topics	14.5 7	25.7 6	14.5 4
College degree	8.7 8	14.3 7	2.9 6
Had special education college courses	7.2 9	14.3 7	N.A. -
Using computers in special education	1.4 10	2.9 8	N.A. -

Note: N.A.: Group 2 subjects were selected on the basis of non-participation in those training topics

CHAPTER V

SUMMARY, DISCUSSION, FURTHER RESEARCH

Attitudes affect both the person who holds the attitude and the person or object about whom the attitude is held. This study was concerned with the paraprofessional population within public schools who assist teachers in the education of special needs children.

This researcher investigated the attitudes of 69 special education paraprofessionals who work in public school settings. The purpose was to determine if paraprofessionals with three or more years of experience would show a difference in attitudes when compared to norms for female nondisabled persons (Yuker et al., 1966). The investigation also tried to determine the effect of special education preservice or inservice training between groups. The functional approach to attitudes (Katz, 1960) provided the theoretical basis. This theory states that to understand attitudes one needs to know the function that attitudes serve. Two functions of the theory were addressed: the value-expressive function which poses that an individual gains satisfaction from holding attitudes which fit his/her self-concept and the knowledge function which provides an individual with cognitive organization for the world's complexities.

The Attitude Toward Disabled Persons Scale - Form A (Yuker et al. 1966) was the assessment tool used to gather the attitude data. Also, a demographic information sheet was used to collect data for sample selection and information used in the correlational analysis. A two-group single observation study was conducted.

The researcher distributed demographic information sheets to two hundred sixty-one paraprofessionals from a large midwestern city. Of the 182 returned, two groups of subjects, all having three or more years of experience, were selected ($n=36$ each) based on their having received or not received special education inservice training. The ATDP - A was sent to the subjects with a 95.7 percent return rate. After scoring, a t test and Pearson correlations were computed.

Overall results indicated significantly more positive attitudes in the total paraprofessional subjects compared to the ATDP - A norms for female nondisabled persons ($p<.02$). When examined individually, the no inservice group mean was statistically significant ($p<.01$) but the group with inservice was not ($p<.2$). With years of experience held constant, no significant difference in attitudes was found between groups. Correlational computations comparing scale scores and the demographic correlates of age, level of children served, having a handicapped relative or friend, and being a parent, years in special education, years in current placement yielded no significant findings. Subject regroupings using years in special education as the basis for group definition also found no significant correlations. No significant findings resulted from a third regrouping based on the paraprofessionals' years in their current placement.

Discussion

Attitudes serve a person's need to understand the world, to protect self-esteem, to help one express values fundamental to oneself, and to make adjustments in doing "the right (rewarding) things at the right time" (Triandis, Adamopoulos, & Brinberg, 1984, p. 29). Why did the

special education paraprofessionals show significantly more positive attitudes toward the disabled than did the ATDP - A (Yuker et al., 1966) norms? The issue of contact seems to come into focus here. The paraprofessionals in this study all had three or more years of experience with special needs children. Yuker (1977) suggested that there are seven contact variables that can make a qualitative difference in attitude shaping. These are frequency, status of persons, the type of interaction, intimacy, societal and institutional norms, the setting and perceived normality. It is fairly safe to assume the paraprofessionals chose their work, that is, their contact with these special children was voluntary. Both groups of paraprofessionals had contact with the special needs children which occurred over time (3 or more years); time enough for frequent, intimate, and accurate observation of the children they serve as well as the teachers they assist. The functional approach to understanding attitudes (Katz, 1960) may help explain these expressed positive attitudes by all subjects. It may also help explain why no difference in attitudes was measured between the two groups.

According to Katz (1960), to understand attitudes one must look at the motivational basis of attitudes to see the function that attitudes serve. Four functions are served by the attitudes people hold. These functions are the utilitarian function, the ego function, the value-expressive function and the knowledge function. Looking, then, at why all the subjects expressed positive attitudes, one might examine the value-expressive function and the knowledge function of attitudes explained by Katz. The first factor to consider is his value-expressive function. This function helps a person feel good about holding attitudes

that are appropriate to self-concept and personal values. Since the motivation may spring from an individual's wish to preserve his or her self-identity, to enhance self-determination, self-expression and favorable self-image (Watts, 1984), this value-expressive function may be the motivational basis for the paraprofessionals' positive attitudes found in this study. The subjects may be working with special needs children because of this value-expressive function it serves for them as individuals.

The second factor to consider is Katz's (1960) knowledge function. Triandis, Adamopoulos & Brinberg (1984) explain that this knowledge function for attitudes helps a person to understand the world and that knowledge will help provide cognitive organization to one's understanding of the world's complexities. They suggest that the attitudes that serve this function may be changed with the provision of new information or new experience directly involving the attitude object. In this study, disabled persons are the attitude objects and contact with those persons may have provided all paraprofessionals with enough new experiences to help shape their positive attitudes toward the disabled. Triandis, Adamopoulos & Brinberg also explain that attitudes have another role as reinforcers because of the emotional aspect of attitudes. Having positive attitudes increases the chances of positive behavior. The paraprofessionals in this study showed positive attitudes they hold toward the exceptional children with whom they have contact. These paraprofessionals may be demonstrating the reinforcing aspect of attitudes.

The imparting of new information, an integral part of the knowledge

function, seems to be the basis for inservice training. The author of this study made the assumption that program trainers providing additional knowledge, in this case the college course, seminar, institute, mini-course, help session, etc., would affect the reasoning process of the participants. It is indicative of the belief that both comprehension and intelligence are important in forming and changing one's opinions, beliefs and attitudes. Bearing in mind that all subjects had positive attitudes, this study did not find a statistically significant difference in attitudes between the paraprofessionals who had had special education inservice and those who did not have special education inservice. This may suggest that the formal inservice training did not have as strong an influence on the paraprofessionals' attitudes as did the contact with the special needs children. This conclusion is supported by other studies as well. Yuker (1977) reported that only 50 percent of the time did providing information result in favorable attitude change. Hannah and Pliner (1983) support this finding and suggest that information alone is not sufficient to change attitudes and that structured contact is effective.

It is an important fact in this study that all paraprofessionals had on-going contact with their supervising teachers as well as contact with the special needs children. Perhaps the exposure to the teacher and the teacher's guidance served the same knowledge function, a sort of very informal ongoing inservice. This may have provided cognitive organization for the paraprofessionals, resulting in positive attitudes held by both groups of subjects.

Another possible explanation for the positive attitudes may be

termed modern cultural factors (Schneider & Anderson, 1980). Selected studies pointed to a general overall improvement in attitudes toward stigmatized persons in increasingly industrialized cultures (Jordan & Friesen, 1967; Hartlage, 1974). The positive attitudes of the paraprofessionals may be indicative of this trend. Conversely, the positive attitudes could be indicative of Lerner's "just world" idea (Triandis, Adamopoulos & Brinberg, 1984). The positive attitudes may be evidence of overly solicitous behavior that helps the paraprofessional feel helpful toward the handicapped children they serve and, therefore, reduce their discomfort in knowing the children endure pain through no fault of their own.

Confounding Factors

Two specific points were confounding factors in this study. One is the interpretation of a question on the demographic information sheet. The other is the semantic interpretation of the label "disabled".

The first point concerns the question on the demographic sheet which asked that subjects indicate the type or label of the special needs children with whom they worked. Eight choices were provided. The author expected the paraprofessionals would circle one of the major handicapping labels. Several of the subjects circled more than one of the categories and sometimes all the categories making the information useless in calculating correlations. There may be several explanations for this. First and foremost was the lack of clarity in the way the question was stated. Second, several subjects appear to have interpreted the question to mean any children with whom they have worked rather than the children with whom they currently work. Third, subjects may not have been aware

of their students' primary handicapping conditions. Fourth, the subjects may have been assigned to work with children of various handicapping conditions such as the children in noncategorical classrooms or the paraprofessional may have had a roving assignment that put her into contact with different children throughout the course of a week. In any case, the information reported was not clear and was not usable when examining correlations.

The second confounding factor is the use of the word "disabled" in this study. When the ATDP - A was returned by the 69 subjects, 22 (32 percent) wrote formal notes, used question marks and exclamation marks, underlined or circled words in certain statements on the assessment, or remarked verbally about questions or concerns they had. The most frequently occurring remarks concerned the word disabled. Of the group with inservice, nine subjects' remarks related specifically to the word "disabled" (e.g., "The questions are rather misleading. A disability can be physical, mental, emotional--therefore it is difficult to answer..."). Of the group with no inservice, three subjects made comments of a similar nature (e.g., "...I question what precisely you mean by disabled.") These subjects seemed to be indicating, then, that they did not know what the label meant or perhaps were unable to assign distinguishing or different characteristics to that word. Leyser and Abrams (1983) remarked that their subjects were uncertain about the word disabled. Did those subjects react to ". . .a conception of a general reference group of disabled, or whether they represent a limited conception of particular subgroups" (p. 42). The paraprofessionals in this study may have experienced this same confusion. Was the reference

to a large group or more particular to specific subgroups of disabling conditions? Conversely, the paraprofessionals may be indicating a sophisticated knowledge of the diverse nature of disabling conditions and were attempting to demonstrate objective perceptions of that label. This might be illustrated by the wide range of scores for the paraprofessionals in the group with inservice and the significantly more positive attitudes of the no inservice group as compared to Yunker's norms. These subjects might be demonstrating more knowledge regarding the disabled population and, therefore, made a more cognizant appraisal of the term.

Misunderstanding the demographic question regarding handicapping labels and the apparent confusion over the word disabled may not be important. Jones (1974), after studying the hierarchical structure of attitudes toward the handicapped, found "a common set of attitudes toward the disabled which cuts across categories of disability and interpersonal situation" (p. 435).

Conclusions

Only very tentative conclusions may be drawn from the limited data. First, contact with special needs children may contribute to the positive attitudes of paraprofessionals. The positive attitudes may be a reflection of the paraprofessional's personality and life experience. However, the data may suggest that personal contact is one way to address the affective component of attitudes.

Second, the provision of information via inservice training may not be the most effective path to attitude change unless an attempt is made to address people's feelings regarding the disabled, that is, to address

the affective component of attitudes. The cognitive component alone may not be the best way to change attitudes of special education paraprofessionals.

Third, the terminology relating to handicapping conditions needs to be clearly and precisely defined so that uniformity in understanding the semantic label is not questioned by either the subject or the investigator.

Lastly, it is encouraging to find people, significant others in the educational world of the special needs child, who display positive attitudes toward the disabled and who seem to have a personal investment in the exceptional children they serve.

Further Research

Further research could take several directions. Because of the wide range of scores found in this study, one intriguing possibility would be to examine the score distribution of a much larger sample of paraprofessionals. Their scores could be compared to determine whether the negatively skewed ATDP-A scores for the special education inservice group are supported with a larger sample or whether these scores were an artifact of this study's population and a result of the small number of subjects.

The second point concerns the development of a standardized assessment that would bring clarity to the label "disabled". Specific definition and referencing of that word in a standardized assessment would help to eliminate the possibility of misdirected responses. Another aspect related to the instrument is the suggestion that the use of second instrument, particularly an assessment of personality factors,

would possibly yield more diverse data.

The third point is related to the paraprofessional population. Investigation of the relationship between the attitudes held by paraprofessionals and their actual behavior toward or with special needs children through field observation would help establish a pattern related to behavioral outcomes. Potentially, that information could be used for evaluation purposes. Do negative attitudes actually lead to rejection and positive attitudes toward acceptance by this population? Are the paraprofessionals' attitudes related to the attitudes of their supervising teacher? Is there a relationship between the paraprofessionals' feelings of making a worthwhile contribution towards the education of special children and positive or negative attitudes towards the handicapped?

The fourth point relative to further research concerns inservice training. Attitudes are often mentioned in the goals for inservice training but little is reported by way of evaluation to look for the expected outcome in attitude change.

The fifth point for investigation is the question regarding the effectiveness of formal inservice training as the best way to prepare the paraprofessional population for working with exceptional children. Is contact the best way to shape attitudes? Paraprofessionals' attitudes upon entry to the work situation could be compared to the attitudes of experienced paraprofessionals. Also, a comparison of the attitudes of paraprofessionals who have contact with different handicapped populations could yield useful information that could aid inservice program planners in setting attitude change goals appropriate to their personnel.

The final point concerns the investigation of the possibility of overall improvement in attitudes toward the disabled in general. Many educationally based populations have been studied in the ten years since the enactment of PL 94-142. Are attitudes toward the disabled improving in all educationally based adults? Are these paraprofessionals' positive attitudes a reflection of an overall trend?

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APPENDIX

December 2, 1985

Dear Special Education Aide,

I am requesting your assistance in a research study concerning
paraprofessionals and disabled persons. This study has the approval of
-----, Director of Special Services, -----.

Please take five minutes to fill out this demographic sheet and return
it to your school secretary, today.

Thank you very much.

Sincerely,

Kathleen Wood

DEMOGRAPHIC INFORMATION SHEET FOR SPECIAL EDUCATION AIDES

NAME _____ SCHOOL _____

(PLEASE CIRCLE THE CHILDREN WITH WHOM YOU WORK.)

INFANTS PRESCHOOL ELEMENTARY JR. HIGH SENIOR HIGH

I WORK WITH CHILDREN WHO ARE: 1. SEVERELY MULTIPLY HANDICAPPED 2. LEARNING DISABLED 3. MENTALLY HANDICAPPED 4. BLIND 5. BEHAVIOR IMPAIRED 6. HEARING IMPAIRED 7. SPEECH AND OR LANGUAGE DISORDERED 8. NON OR MULTI-CATEGORICAL

HOW MANY YEARS HAVE YOU BEEN IN A SPECIAL EDUCATION PLACEMENT?

_____ (COUNT YEARS IN OTHER DISTRICTS)

ARE YOU A PARENT? _____ YOUR BIRTHPLACE? _____

HOW LONG HAVE YOU BEEN IN YOUR CURRENT PLACEMENT? _____

DO YOU HAVE A RELATIVE OR CLOSE FRIEND WHO IS HANDICAPPED? _____

YOUR AGE? (CIRCLE) UNDER 25 UNDER 35 UNDER 45 UNDER 55 UNDER 65

DOES YOUR DISTRICT REQUIRE YOU TO ATTEND INSERVICE? _____

HAVE YOU EVER BEEN AN AIDE WHOSE DUTIES ARE NON-INSTRUCTIONAL? _____

PLEASE CHECK ANY PRESERVICES OR INSERVICE THAT YOU HAVE ATTENDED.

(The inservice or preservice training or staff development programs may have been labeled as a workshop, conference, mini-course, seminar, institute, lecture, meeting, help-session, etc.)

1. _____ PERSONAL HEALTH AND OR WELLNESS

2. _____ EDUCATIONAL SUBJECT MATTER NOT IN SPECIAL EDUCATION

3. _____ USING COMPUTERS IN SPECIAL EDUCATION (IEP WRITING)

4. _____ USING COMPUTERS IN GENERAL EDUCATION SUBJECT MATTER

5. _____ SPECIFIC TOPICS GEARED TOWARD SPECIAL EDUCATION

(for instance, your role expectations, policy or procedures, dealing with parents, legal issues, integrated models, data collection, materials or others)

6. _____ CONCERNING MAINSTREAMING HANDICAPPED CHILDREN

7. _____ CONCERNING THE SPECIAL EDUCATION STUDENT AND SEIZURE MANAGEMENT OR OTHER PHYSICAL HEALTH ISSUES

PLEASE LIST ANY COLLEGE COURSES YOU MAY HAVE TAKEN OR YOUR DEGREE IF APPLICABLE. USE THE BACK OF THIS PAPER IF NECESSARY.

January 15, 1986

Dear Special Education Aide:

Recently, you graciously completed a demographic information data sheet as a part of my research project regarding handicapped persons. As a result of certain reported information on that sheet, I am requesting that you participate in this final phase of my study. This is a survey that will take about ten minutes to complete. Nothing further will be asked of you. Please return it to me via the enclosed stamped self-addressed envelope. For purposes of monitoring and followup the surveys have been coded. However, there is no need to sign your name and it will be kept completely confidential.

As you are aware, the credibility of research increases with high percentage of survey return. I am hopeful that you will again grant me the time for answering this final enclosed survey. If I don't hear from you by January 27, I will send you a reminder.

Your special education director is aware of, and has approved this study. My hope is the results of this study may help in the development or modification of training programs for paraprofessionals in the field of special education.

Again, thank you very much for your time on this. If you have any questions, please feel free to call me.

Sincerely,

Kathleen Wood