

ATTITUDES TOWARD DISABLED PERSONS AS EXPRESSED  
BY STATE AND PRIVATE REHABILITATION  
PERSONNEL

By

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## CHAPTER I

### THE RESEARCH PROBLEM

#### Introduction

Attitudes toward disabled persons have not remained constant in the United States. The development of attitudes has been in three stages: persecution, protection, and acceptance (Haring, 1978).

During the persecution stage, disabled persons were often kept out of sight--locked in rooms, attics, and other isolated places. Due to the work of such people as Horace Mann, Samuel Gridley Howe, and Dorothea Dix, attitudes toward disabled persons began to change in the early nineteenth century. Thus, the era of institutions came about and disabled persons were being protected--but not necessarily educated or rehabilitated. In the present stage of acceptance, disabled persons are receiving more education and rehabilitative services. They are not being put in institutions and forgotten about as often as they have been in the past. The present trend of education and rehabilitation of disabled persons is partially due to federal laws such as The Rehabilitation Act of 1973 and Public Law 94-142, The Education of All Handicapped Children Act (Haring, 1978).

People of the United States are beginning to see that disabled persons can be an asset instead of a liability to the country. However, though we are apparently in the acceptance stage, caution should be taken. Many of the public do not have favorable attitudes toward

disabled persons. English and Oberle (1971) pointed out that studies indicate a little over half of the general population have less than favorable attitudes while other research indicates that at least, employers have favorable attitudes toward disabled persons (Curran, 1976). However, the findings of Schroedel and Jacobsen (1978) indicate employer attitudes toward disabled persons may not be as favorable as indicated by Curran. The conclusions of Schroedel and Jacobsen (1978), reported in a Rehab Brief are as follows:

The success of rehabilitating an individual for employment may rest ultimately on an employer's willingness to hire a disabled worker. Unfortunately, what an employer says about hiring practices and what that same employer does when confronted with a disabled applicant may be quite different. Evidence suggests that about 60 percent of employers say they would hire disabled workers. Only one-third do so. In other words, there is more verbalized intention to hire than actual hiring. Furthermore, a majority of employers apparently lack direct experience with disabled employees (Rehabilitation Research Institute, 1979, p. 1).

Before rehabilitation clientele (disabled persons) are ready to seek employment, it is often necessary to provide rehabilitation services such as adjustment counseling, vocational counseling, and vocational training. Therefore, the attitudes toward disabled persons held by rehabilitation personnel may be a significant factor concerning rehabilitation and employment of rehabilitation clientele. A study by Krauft, Rubin, and Bozarth (1975) indicates that attitudes toward disabled persons may be an essential characteristic of rehabilitation personnel and that attitudes of such personnel may affect the rehabilitation of disabled persons, especially the more severely disabled.

Expectations appear to be related to attitudes (Krauft et al., 1975). The expectations communicated to clientele by rehabilitation personnel may be a factor in whether or not successful

rehabilitation occurs. There are indications that expectations are related to outcome (Goldstein, 1962; Kerr, 1970; Rosenthal, 1966; Schofield and Kuncze, 1971). Thus, rehabilitation personnel who have low or less than positive attitudes toward disabled persons may not be as likely to expect successful rehabilitation of their clientele as are personnel who have high or positive attitudes toward disabled persons.

In a study concerning attitudes toward disabled persons of rehabilitation and non-rehabilitation groups, Downes (1967) found that the rehabilitation counselor group scored more positive ratings on the Attitudes Toward Disabled Persons Scale (ATDP) (Yuker, Block and Campbell, 1960) than the non-rehabilitation related group. Additionally, groups associated with rehabilitation scored higher than groups not associated with rehabilitation. Further results showed that counselors who held master's degrees in the areas of rehabilitation counseling, school counseling, psychology, or social work scored more positive ratings than counselors without master's degrees. Also, undergraduate students majoring in rehabilitation scored more positive ratings than students majoring in areas related to the behavioral sciences. The results of Downes' (1967) study indicate that rehabilitation personnel who have had training in rehabilitation, or a related area, may have higher expectations and more positive attitudes toward disabled persons than personnel who have had little or no training in such areas.

There appears to be little, if any, research concerning attitudes toward disabled persons of sheltered workshop personnel. However, research indicates that sheltered workshops who have professional

personnel provide services for more clientele and tend to have higher placement rates than workshops who have non-professional personnel (Kimberly, 1967). These findings may indicate that professional sheltered workshop personnel have more positive attitudes toward disabled persons than non-professional personnel. The results of Kimberly's study (1967) appear to support the findings of Downes (1967) in that personnel with training in rehabilitation, or a related area such as special education, have more positive attitudes toward disabled persons than personnel with little or no training in such areas.

Although there are inconsistencies in the research findings, demographic variables other than education and training appear to be associated with attitudes toward disabled persons. Such research findings will be discussed in Chapter II, The Review of Literature.

State and private rehabilitation personnel often play a significant role in disabled persons becoming gainfully employed. Although many employers may be reluctant to hire disabled persons (Schroedel and Jacobsen, 1978), rehabilitation personnel often convince employers to give disabled persons the opportunity to show they can make good employees. Since rehabilitation personnel are often a link between disabled persons and employers and since they play a major role in preparing disabled persons for employment and rehabilitation, the attitudes held by rehabilitation personnel toward disabled persons are significant, especially since such attitudes may be a factor in whether or not disabled persons become rehabilitated (Krauft et al., 1975). For the above reasons, research findings concerning attitudes toward disabled persons held by rehabilitation personnel will be discussed in Chapter II.

## Statement of the Problem

Since there is a potential causal link from attitudes to expectations to successful placement of disabled persons, it appears potentially beneficial, as a systematic starting point, to document and delineate the attitudes of those responsible for the rehabilitation of disabled persons. Such information may be useful to rehabilitation administrators if there are indications that one or more rehabilitation personnel groups hold negative attitudes toward disabled persons. The information may lead to additional or in-service training for rehabilitation personnel who hold negative attitudes toward disabled persons. Thus, the attitudes held by such rehabilitation personnel toward disabled persons may be strengthened, resulting in better rehabilitation services being provided for disabled persons.

The findings of the present study may also indicate the characteristics of rehabilitation personnel that tend to be related to positive attitudes toward disabled persons. Such information may be useful to rehabilitation administrators in selecting future rehabilitation personnel.

Research findings indicate that attitudes toward disabled persons held by rehabilitation personnel may be related to the rehabilitation outcome of disabled persons (Krauft et al., 1975). These rehabilitation counselors, rehabilitation evaluation center personnel, and sheltered workshop personnel often work with the same clientele. Negative attitudes toward disabled persons held by one or more of the rehabilitation personnel groups may have an adverse affect on the rehabilitation outcome of disabled persons. Such negative attitudes may result in disabled persons not completing vocational training

programs, working, or staying in sheltered environments when they could be gainfully employed. Rehabilitation counselors often provide rehabilitative services for disabled persons based on recommendations of other rehabilitation personnel and professionals. However, rehabilitation counselors who hold negative attitudes toward disabled persons may be reluctant to follow such recommendations. Rehabilitation evaluation center personnel, who evaluate disabled persons and make recommendations to rehabilitation counselors, may make inadequate recommendations if they hold negative attitudes toward disabled persons. Sheltered workshop personnel who hold negative attitudes toward disabled persons may be responsible for keeping disabled persons in a sheltered environment when such persons could be functioning in society. Findings of the present study will indicate differences, if any, in attitudes toward disabled persons among the rehabilitation personnel groups.

#### Purpose of the Study

The purpose of the present study consists of the following:

1. To determine differences, if any, in attitudes toward disabled persons held by rehabilitation counselors, rehabilitation evaluation center personnel, and sheltered workshop personnel.
2. To determine differences, if any, in attitudes toward disabled persons held by professional and non-professional sheltered workshop personnel.
3. To identify demographic variables that may be associated with attitudes toward disabled persons.

The need and possible gains from such information by rehabilitation administrators provide the significance of the study. The information may lead to additional or in-service training for rehabilitation personnel concerning rehabilitation of disabled persons and may be useful to rehabilitation administrators in selecting future rehabilitation personnel. The information may also be useful to educators and those interested in licensing/certification issues.

### Research Questions

The present study asks five questions:

1. Are there differences in attitudes toward disabled persons expressed by different rehabilitation personnel groups?
2. Are there differences in attitudes toward disabled persons expressed by professional and non-professional sheltered workshop personnel?
3. Does education level make a difference in attitudes toward disabled persons?
4. Does amount of work experience with disabled persons make a difference in attitudes toward disabled persons?
5. Are there differences in attitudes toward disabled persons expressed by disabled and non-disabled rehabilitation personnel?

### Definition of Terms

For the purpose of the investigation and to facilitate understanding, the following terms and definitions will be employed:

Rehabilitation personnel refers to state and private rehabilitation counselors, rehabilitation evaluation center personnel, and

sheltered workshop personnel of Oklahoma.

Rehabilitation counselors refers to field counselors, with the exception of those assigned to rehabilitation evaluation centers, who work in the Department of Human Services of Oklahoma. Such personnel are required to have a master's degree or equivalent.

Rehabilitation evaluation center personnel refers to evaluators, field counselors, and psychometrists assigned to rehabilitation evaluation centers of the Department of Human Services of Oklahoma. Such personnel are required to have a master's degree or equivalent.

Sheltered workshop personnel refers to staff members of private sheltered workshops in Oklahoma who have direct work contact with disabled persons. A majority of such personnel are not required to have a college degree.

Professional sheltered workshop personnel refers to personnel who hold a graduate degree in rehabilitation counseling or related areas, such as special education, or personnel who have been assigned a minimum of 13 points. Personnel are assigned two points for each academic year of education completed above high school and one point for each year of experience in working with disabled persons. A maximum of five points may be assigned for work experience.

Kimberly (1967) found that not everyone agrees on the criteria for determining professional from non-professional sheltered workshop personnel. In order to distinguish professional from non-professional personnel, Kimberly (1967) used the following formula:

. . . individuals, other than workshop directors, were automatically classified as professional if they had advanced degrees, in other words more than a B.A. degree, unless the degree was in an unrelated field; those with a high school diploma or less with five exceptions were automatically classified as non-professional. For individuals falling between these two educational categories, the following formula was used: two points were assigned for each year of education beyond high school. . . and one point was assigned for each year of experience up to a maximum of five. Under this system, the maximum score any individual could accumulate was 19. No individual was classified as a professional who had a score under 11 (p. 1, 1967).

Therefore, the researcher developed the formula mentioned above to distinguish professional from non-professional sheltered workshop personnel.

Non-professional sheltered workshop personnel refers to personnel who hold only a high school diploma or less, or who have been assigned less than 13 points.

Sheltered workshop refers to all privately run facilities, with the exception of facilities geared specifically toward the visually impaired and blind, that provide sheltered employment and work and social skill training for disabled persons in Oklahoma.

The Attitudes Toward Disabled Persons Scale (ATDP) is an instrument designed to measure general attitudes toward physically disabled persons (Yuker, Block, and Young, 1970).

Disabled persons refers to individuals who are physically impaired due to chronic disease, accidents, and congenital conditions. Chronic disease accounts for 88 percent of all disabling conditions while accidents account for 10 and congenital conditions for 2 percent (McGowan and Porter, 1967). Haring (1978) and Meyen (1978) report that .5 percent of the children in the United States are crippled or have other health handicaps. Meyen (1978) indicates that between .6 to .8

percent of the children in the United States have a hearing handicap and that 3.5 to 5 percent of the children have a speech handicap based on 1978 population estimates.

#### Assumptions and Limitations

Assumptions underlying the study are that the ATDP discriminates and measures attitudes toward physically disabled persons, and that respondents have worked with physically disabled persons long enough to have formed opinions concerning such persons.

Limitations of the study are that: 1.) respondents may not express their true feelings toward disabled persons; 2.) respondents may refuse to indicate opinions concerning statements of the ATDP since it is a six point Likert-type scale; 3.) respondents tend to pick middle options on scales such as + 1; and 4.) any conclusions drawn from the study will be generalizable only to similar rehabilitation personnel groups.

## CHAPTER II

### REVIEW OF THE LITERATURE

#### Introduction

Chapter II presents information and findings from reviewed literature that appear to enhance understanding of the factors involved in the study. Findings concerning attitudes toward disabled persons held by the general population, occupational groups, rehabilitation personnel, and sheltered workshop personnel will be discussed. Demographic variables in relation to attitudes toward disabled persons will be discussed. The demographic variables considered significant in the present study are educational level, contact experience with disabled persons, and disability. The significance of rehabilitation and sheltered workshops will also be discussed.

#### Attitudes Toward Disabled Persons as Expressed by Different Groups

##### General Population

English and Oberle (1971) noted that a little more than half the general population have favorable or positive attitudes toward disabled persons. Thus, a sizable amount of the population may have unfavorable attitudes. Some suggest a larger amount of the population may have

negative attitudes toward disabled persons than indicated by English and Oberle (1971). Comer and Piliavian (1975) state that:

Indeed, one of the norms of our society is to be kind to disabled persons. Subjects in past studies may have found it quite threatening to admit publicly any negative attitudes toward a handicapped person. They may merely have been stating the attitude they thought the experimenter or, more generally, society would approve of (p. 1).

Although there are indications that a sizable amount of the general population have less than positive attitudes toward disabled persons, there appears to be occupational attitudinal differences. However, there are inconsistencies in the literature.

#### Occupational Groups

Dickie (1967), using a modified version of the ATDP, surveyed four different occupational groups. The groups consisted of: 1.) subjects involved in a teaching or training relationship with the physically disabled; 2.) elementary and secondary teachers not necessarily involved in working with physically disabled persons; 3.) salaried white-collar workers, skilled laborers, clerical workers, and unskilled workers; and 4.) executive and managerial personnel engaged primarily in industry. No significant differences were found in attitudes toward disabled persons among the four groups. The results indicate attitudes toward disabled persons held by subjects who have had training relationships and work experience with disabled persons are no different from subjects who have had no such relationships. The results are somewhat surprising in that one could hypothesize that training relationships and work experience with disabled persons would lead to positive attitudes toward disabled persons. Although there are inconsistencies

in the literature, the results are supported by the findings of Jordan and Cessna (1969).

Using the ATDP, Jordan and Cessna (1969) surveyed four different occupational groups (special education and rehabilitation personnel, regular teachers, managers and executives, and white-collar laborers) in Japan. The results indicated no significant differences in attitudes toward disabled persons among the four occupational groups.

Although Dickie (1967) and Jordan and Cessna (1969) found no significant differences in attitudes toward disabled persons among different occupational groups, other findings indicate that differences may exist (English and Oberle, 1971; Jordan and Boric, undated; Merlin and Kauppi, 1973).

Jordan and Boric (undated) found in Yugoslavia, an occupational group of laborers had significantly more negative attitudes toward disabled persons than the occupational groups of special education and rehabilitation personnel, regular teachers, and managers. The other three occupational groups had similar attitudes toward disabled persons, as inferred by the ATDP. The findings indicate that a relationship may exist between education and training and positive attitudes toward disabled persons.

English and Oberle (1971) attempted to discover whether significant differences in attitudes toward physically disabled persons exist between occupational groups that place a high emphasis on physique and occupational groups that place a low emphasis on physique. They hypothesized that an occupational group with low emphasis on physique would have significantly more positive attitudes toward physically disabled persons than would an occupational group with high emphasis

on physique. Three psychiatrists were used as judges to identify groups with high and low emphasis on physique. Airline stewardesses were selected as the high emphasis group and typists as the low emphasis group. Using a stratified random sampling technique, 50 subjects from each occupational group were selected and administered the ATDP. A significant difference was found between the two occupational groups and the hypothesis was supported. The occupational group (typists) with low emphasis on physique inferred more positive attitudes toward disabled persons on the ATDP than did the high emphasis occupational group (stewardesses).

The results of a study by Merlin and Kauppi (1973) lends support to the suggestion of English and Oberle (1971) that attitudes toward disabled persons are in part a function of those entering such occupations. The subjects used in the study consisted of music, philosophy, occupational therapy, and physical therapy university students. The occupational and physical therapy students held more positive attitudes toward disabled persons than the music and philosophy students.

#### Rehabilitation Personnel

It would seem probable that rehabilitation personnel would have more positive attitudes toward disabled persons than the general population and non-rehabilitation related occupational groups (Ashburn, 1974; Downes, 1967). In a study using rehabilitation administrators of facilities and the general population as subjects, Ashburn (1974) found, as inferred by the ATDP, this to be the case. Downes (1967) also found that rehabilitation counselors, according to scores on the

ATDP, had more positive attitudes toward disabled persons than persons employed in non-rehabilitation settings. However, as reported earlier, Dickie (1967) and Jordan and Cessna (1969) found no significant differences in attitudes toward disabled persons between rehabilitation and non-rehabilitation occupational groups.

Although there are indications that rehabilitation personnel have as positive or more positive attitudes toward disabled persons than the general population and other occupational groups (Ashburn, 1974; Dickie, 1967; Downes, 1976; Jordan and Cessna, 1969), there may be attitudinal differences among the different rehabilitation occupational groups. Some rehabilitation personnel groups may have significantly more positive attitudes toward disabled persons than others. Bell (1962) found a significant difference in attitudes toward disabled persons between rehabilitation workers and hospital employees who had minimum contact with disabled persons. The results, however, are somewhat surprising in that the hospital employees with minimum contact with disabled persons held more positive attitudes.

In a study using five rehabilitation groups as subjects (rehabilitation counselors, disability determination examiners, facility workers, full-time graduate rehabilitation counseling students, and undergraduate rehabilitation students), Crunk (1975) found that differences in attitudes toward disabled persons existed among the groups. However, no group expressed positive attitudes and all groups viewed severely disabled persons more negatively as opposed to disabled and non-disabled persons. Although no group expressed positive attitudes, the groups, which expressed the most positive to the least positive, are as follows: full-time graduate rehabilitation counseling students; undergraduate

rehabilitation counseling students; disability determination examiners; rehabilitation counselors; and facility workers.

The findings of the studies reviewed concerning attitudinal differences toward disabled persons of different occupational groups may be significant to rehabilitation administrators and sheltered workshop directors. Merlin and Kauppi (1973) state that:

Many persons working in rehabilitation facilities come from other occupations. Facility administrators should be aware of the differing role expectations for persons with disabilities related to occupational status. Further, they may wish to arrange training which will change such attitudes more quickly than the influence of unguided experience with persons with disabilities (p. 78).

#### Sheltered Workshop Personnel

Although the author is unaware of any research findings concerning attitudes toward disabled persons of sheltered workshop personnel, professional or otherwise, it appears that such attitudes may be related to the rehabilitation success rate (job placement) of sheltered workshop clientele. According to Whithead (1976), the success of sheltered workshops is directly proportional to the training skills and abilities of workshop personnel.

In a study sampling 400 sheltered workshops throughout the country, Greenleigh Associates (1975) found that the majority of the personnel of sheltered workshops (including production and clerical personnel) are non-professional. They found that the yearly placement rate of the sheltered workshops sampled was 13 percent, and that only 5 percent of the sheltered workshops had a placement rate of 30 percent or more. Greenleigh Associates (1975) report that larger workshops place more clients than smaller workshops but that the placement rates are the

same. They also indicate that sheltered workshops with professional personnel have a higher placement rate as they state:

. . . the proportion of professionals to total staff is related to higher placement rates in regular workshops. This suggests that workshops which are relied upon for evaluation and training and which have the professional staffs to deliver such services do have more effective placement (Greenleigh Associates, 1975, p. 21).

Kimberly (1967), using a sample of 123 sheltered workshops in New York, New Jersey, and Pennsylvania, found that sheltered workshops with non-professional personnel served fewer clients and tended to have lower placement rates than sheltered workshops with professional personnel.

Kimberly (1967) states:

. . . workshops with high professional densities tend to have relatively high placement rates; increasing amounts of professional service tend to increase the probability of client placement (p. 8).

The findings of Greenleigh Associates (1975) and Kimberly (1967) may indicate that professional sheltered workshop personnel have more positive attitudes toward disabled persons than do non-professional sheltered workshop personnel. Thus, sheltered workshops which have personnel with positive attitudes toward disabled persons may serve, rehabilitate, and place more disabled persons than sheltered workshops with personnel who have less than positive attitudes.

#### Selected Demographic Variables

There appear to be demographic variables that are related to attitudes toward disabled persons (English, 1971a; 1971b). The present study views the variables of educational level, amount of contact experience with disabled persons, and disability as significant. These demographic variables are considered significant due to the fact that

they can be changed. Rehabilitation administrators may provide their personnel with additional or in-service training and contact experience with disabled persons. They may also require their personnel to be disabled for a period of time to gain a better understanding of disabled persons. For example, rehabilitation personnel may be required to stay in a wheelchair for a week. By doing so they may learn what it is like for disabled persons to live confined to a wheelchair.

### Educational Level

Educational level may be related to attitudes toward disabled persons. There are indications that such attitudes become more positive in high school and college students as they progress through grade levels (Horowitz, Reese, and Horowitz, 1965; Siller, 1964). There are also indications that college students appear to be more accepting of disabled persons than non-college individuals (Siller, Chipman, Ferguson, and Vann, 1967).

Golin (1970), in a study using college students as subjects, found that favorable information concerning disabled persons may affect the attitudes toward disabled persons in a positive way. Results also indicated the reverse appears to be true of unfavorable information.

Webster (1967) found that adolescents whose fathers were employed in professional, semi-professional, or clerical positions had more favorable attitudes toward disabled adolescents than did adolescents whose fathers were employed in service or labor occupations. Webster also found no significant differences in attitudes toward disabled persons between subjects who had knowledge about physical disabilities and those who did not.

There are, however, inconsistencies in the research findings. In a study using rehabilitation workers and hospital employees as subjects, Bell (1962) found no significant relationship between the level of education and attitudes toward disabled persons.

The findings of Cohen (1963), Conine (1968), and Palmerton and Frumkin (1969a) indicate that higher levels of education may result in negative attitudes toward disabled persons instead of positive attitudes as indicated by Horowitz et al. (1965), and Siller (1964). Cohen (1963) found that employers with high educational levels were less willing to hire mentally retarded persons than employers with lower levels of education. Palmerton and Frumkin (1969a) found that college counselors who were more knowledgeable about disabilities reflected less positive attitudes toward disabled persons than counselors who were less knowledgeable. Conine (1968), however, using a sample of 1000 teachers, found that there were no significant differences in attitudes toward disabled persons between teachers who held bachelor's degrees and teachers who held master's degrees.

#### Contact Experience with Disabled Persons

There are inconsistent findings in relation to attitudes toward disabled persons and amount of contact experience with disabled persons. Most findings indicate that no significant differences exist in attitudes toward disabled persons between individuals who have high contact experience and individuals who have low contact experience with disabled persons (Bishop, 1969; Dickie, 1967; Drude, 1971; Novick, 1972; Wallston and Robinson, 1972). However, other findings indicate contact experience with disabled persons does make attitudinal differences (Anthony, 1969; Conine, 1968; Golin, 1970; Palmerton and Frumkin, 1969b).

Conine (1968) and Anthony (1969) found that contact with disabled persons appears to yield favorable attitudes toward disabled persons. Conine's subjects consisted of school teachers and family, friends, co-workers, students, and acquaintances. Anthony's subjects consisted of disabled and non-disabled summer camp counselors.

The findings of Palmerton and Frumkin (1969b) indicate that individuals who have favorable attitudes toward disabled persons enjoy contact with physically disabled persons whereas individuals with less than favorable attitudes toward disabled persons often avoid such contact. The quality of contact, rather than the amount, also appears to yield more favorable attitudes toward disabled persons (Schroedel, 1978; Siller et al., 1967).

Although there are inconsistent findings concerning whether or not amount of contact experience with disabled persons is related to attitudinal differences, Cobun (1972) found that rehabilitation counselors rated contact experience with disabled persons the most effective way to change such attitudes.

### Disability

There appears to be very little research comparing attitudes toward disabled persons as held by disabled and non-disabled rehabilitation personnel. However, with laws such as The Rehabilitation Act of 1973 and The Education for All Handicapped Children Act (P. L. 94-142) being in force, more disabled persons will be, and are, seeking education and employment. Many are electing to study and work in an area of the helping professions.

Drude (1971), using graduate students majoring in counseling as subjects, found no significant difference in attitudes toward disabled

persons between disabled and non-disabled students. Hedgeman (1971) also found no significant difference in attitudes toward disabled persons between disabled and non-disabled rehabilitation counselors. Hedgeman's sample consisted of 50 disabled counselors and 53 non-disabled counselors.

The studies reviewed may indicate that disabled persons who elect to become employed in the helping professions are persons who have accepted their disability. According to McGowan and Porter (1967) disabled persons who have not accepted or adjusted to their disability in a positive way are likely to overcompensate (neurotic striving for superiority), succumb to social expectations (playing the role expected of a person with a particular disability), or have what Wright (1960) calls the "as if" behavior (attempting to conceal the disability). Such persons are not as likely to complete training programs or to work with other disabled persons as are disabled persons who have accepted and adjusted to their disability in a positive way. McGowan and Porter (1967) state:

A large number of rehabilitation clients are handicapped by emotional problems related directly or indirectly to their physical disability. Because of the limits imposed on them by their disability, many avenues of normal relationships are closed. Socially, physically, and economically, they have encountered frustrating circumstances that have led to conflict. These frustrations and conflicts may have resulted either from their disability, from their attitude toward their disability, or from social pressure. Hostility, aggressive behavior, submissiveness, dependency, and withdrawal symptoms are often a result of these frustrations (p. 63).

#### Other Demographic Variables

Demographic variables (other than educational level, amount of contact experience with disabled persons, and disability) are not

viewed as significant to the present study. Persons are not able to choose their sex or age. However, research indicates that either females tend to have more positive attitudes toward disabled persons (Conine, 1968; Dickie, 1967; Jabin, 1966; Yuker et al. (1970), or that no significant difference exists between males and females concerning attitudes toward disabled persons (Bishop, 1969; Drude, 1971; Mader, 1967).

Research findings indicate that age is not a significant factor in relation to attitudes toward disabled persons (Bishop, 1969; Drude, 1971; Moses, Rubin, and Turner; undated). English (1971a) reports that:

Although significant relationships have been reported which would suggest that young adults hold slightly more favorable attitudes toward disabled persons than adults in general, the size of the correlation has been very low, under .20, and accounts for little of the variance (p. 7).

Drude (1971) and Moses et al. (undated) found no significant difference among other demographic variables (religion, marital status, and size of community) and attitudes toward disabled persons.

#### Rehabilitation and Sheltered Workshops

Although the feasibility of sheltered workshops has been questioned (Riscalla, 1974), they often play a significant part in the rehabilitation process of disabled and mentally retarded persons (Permenter, 1973; Posner, 1974). The services provided by both rehabilitation counselors and sheltered workshops are often necessary in order for successful rehabilitation to occur. Rehabilitation counselors depend on sheltered workshops to teach social and work skills and to provide sheltered employment for rehabilitation clientele. Sheltered workshops depend on rehabilitation counselors to provide such services as vocational evaluation, counseling, medication, and

any other services required by clientele regarding rehabilitation that are within the limits of rehabilitation counselors.

Sheltered workshops are handicapped in the rehabilitation of clientele without the services provided by rehabilitation counselors.

Whithead (1976) states that:

Without rehabilitation services, a sheltered workshop is merely an industrial plant hiring handicapped workers. Lack of these services denies the true purpose of helping mentally retarded persons gain the pride and respect that comes with earning a living, and, where possible, taking their place in the mainstream of society (p. 36).

The above statement is not only apparent for mentally retarded persons, but also for physically disabled persons. Although most clientele of sheltered workshops are mentally handicapped, many are physically disabled and many of the mentally handicapped are also physically disabled (O'Connor, Justice and Payne, 1970).

#### Summary

In the present chapter, research findings related to attitudes toward disabled persons were reviewed. The study asked the following questions:

1. Are there differences in attitudes toward disabled persons expressed by different rehabilitation groups? Research findings indicated that rehabilitation personnel have as positive or more positive attitudes toward disabled persons than the general population and other occupational groups (Ashburn, 1974; Dickie, 1967; Downes, 1967; Jordan and Cessna, 1969). Other findings indicate that differences in attitudes toward disabled persons among rehabilitation personnel exist (Bell, 1962; Crunk, 1975).

2. Are there differences in attitudes toward disabled persons expressed by professional and non-professional sheltered workshop personnel? The author is unaware of any research findings concerning attitudes toward disabled persons of sheltered workshop personnel. However, findings indicate sheltered workshops with non-professional personnel serve fewer clients and tend to have lower placement rates than workshops with professional personnel (Greenleigh Associates, 1975; Kimberly, 1967). According to Whithead (1976) the success of sheltered workshops is related to the training skills and abilities of the workshop personnel. These findings may indicate that professional sheltered workshop personnel have more positive attitudes toward disabled persons than non-professional sheltered workshop personnel.

3. Does education level make a difference in attitudes toward disabled persons? There are inconsistencies in the research findings concerning the relationship between education and attitudes toward disabled persons. Findings of Golin (1970), Horowitz et al. (1965), Siller (1964), and Webster (1967) indicate that education leads to more positive attitudes toward disabled persons. Bell (1962) found no significant relationship between education and attitudes toward disabled persons and the findings of Cohen (1963), Conine (1968), and Palmerton and Frumkin (1969a) indicate that higher levels of education may result in negative attitudes toward disabled persons.

4. Does amount of work experience with disabled persons make a difference in attitudes toward disabled persons? There are inconsistencies in the research findings concerning the relationship between contact experience with disabled persons and attitudes toward

disabled persons. The findings of Bishop (1969), Dickie (1967), Drude (1971), Novick (1972), and Wallston and Robinson (1972) indicate that a relationship does not exist while the findings of Anthony (1969), Conine (1968), Golin (1970), and Palmerton and Frumkin (1969b) indicate that a relationship does exist.

5. Are there differences in attitudes toward disabled persons expressed by disabled and non-disabled rehabilitation personnel? The review of the literature indicates that little research has been done in the above area. The research that has been done indicates no significant differences in attitudes toward disabled persons expressed by disabled and non-disabled rehabilitation personnel (Drude, 1971; Hedgeman, 1971).

## CHAPTER III

### METHODOLOGY

The attitudes that rehabilitation personnel hold toward disabled persons may be a significant factor in relation to the rehabilitation of disabled persons. Accordingly, it is the purpose of the present study to determine differences, if any, in attitudes toward disabled persons among rehabilitation counselors, rehabilitation evaluation center personnel, and sheltered workshop personnel, and to identify selected demographic variables that may have significant relationships with attitudes toward disabled persons.

#### Hypotheses

Based on the findings of Ashburn (1974), Dickie (1967), Downes (1967), and Jordan and Cessna (1969), the following hypotheses was formulated:

Hypothesis One: There are no differences in attitudes toward disabled persons among sheltered workshop personnel, rehabilitation counselors, and rehabilitation evaluation center personnel as measured by the ATDP.

From the findings of Greenleigh Associates (1975), Kimberly (1967), and Whithead (1976), the following hypothesis was formulated:

Hypothesis Two: There are no differences in attitudes toward disabled persons between professional and non-professional sheltered workshop personnel as measured by the ATDP.

From the findings of Bell (1962), Cohen (1963), Conine (1968), Golin (1970), Horowitz et al. (1965), Palmerton and Frumkin (1969a), Siller (1964), and Webster (1967), the following hypothesis was formulated:

Hypothesis Three: There are no differences in attitudes toward disabled persons between rehabilitation personnel who have higher levels of education and rehabilitation personnel who have lower levels of education as measured by the ATDP.

Based on the findings of Anthony (1969), Bishop (1969), Conine (1968), Dickie (1967), Drude (1967), Golin (1970), Novick (1972), Palmerton and Frumkin (1969b), and Wallston and Robinson (1972), hypothesis four was formulated:

Hypothesis Four: There are no differences in attitudes toward disabled persons between rehabilitation personnel who have had five years or less contact experience in working with disabled persons and rehabilitation personnel who have had more than five years of contact experience in working with disabled persons as measured by ATDP.

From the findings of Drude (1971) and Hedgeman (1971), the following hypothesis was formulated:

Hypothesis Five: There are no differences in attitudes toward disabled persons between rehabilitation personnel who have a physical disability and rehabilitation personnel who do not have a physical disability as measured by the ATDP.

## Subjects

Subjects for the present study included rehabilitation counselors and rehabilitation evaluation center personnel employed by the Department of Human Services of Oklahoma, and personnel of private sheltered workshops in Oklahoma who have direct contact experience with disabled persons. A list of rehabilitation counselors and rehabilitation evaluation center personnel was obtained from the Department of Human Services of Oklahoma. Personnel lists were also obtained from private sheltered workshops of Oklahoma. All employees listed by the Department of Human Services and private sheltered workshops were mailed questionnaire packages.

The study consisted of 235 total subjects out of 302 solicited. Rehabilitation counselors accounted for 101 (43%) of the subjects, rehabilitation evaluation center personnel accounted for 28 (12%) of the subjects and sheltered workshop personnel accounted for 106 (45%) of the subjects. Fifty-two (22%) of the subjects indicated they have a physical disability. One hundred thirty-five of the subjects were males, 98 (42%) were females, and the median age of the subjects was 40.188 years, and ranged from 18 to 64 years. The educational level of the subjects ranged from high school diploma or less to graduate work beyond the master's degree (Table I). Years of work experience with disabled persons ranged from less than one year to more than five years (Table II).

## Instrumentation

### The Attitudes Toward Disabled Persons Scale (ATDP)

The Attitudes Toward Disabled Persons Scale (ATDP), Appendix A,

was used to measure the general attitudes toward physically disabled persons, with the exception of the visually handicapped and the blind, of rehabilitation personnel in Oklahoma.

TABLE I  
FREQUENCIES AND PERCENTAGES OF EDUCATIONAL LEVEL  
OF REHABILITATION PERSONNEL

Amount of Education	Frequency	Percentage
High School Diploma or Less	25	10.6
One Year of College	14	6.0
Two Years of College	9	3.8
Three Years of College	4	1.7
Four Years of College (No Degree)	6	2.6
Bachelor's Degree	24	10.2
Bachelor's Degree Plus 12 Hours Graduate Work	6	2.6
Bachelor's Degree Plus One Year of Graduate Work	5	2.1
Master's Degree in Rehabilitation Counseling or Special Education	35	14.9
Master's Degree in Educational Psychology, Sociology, or Social Work	28	11.9
Master's Degree in Other Areas	27	11.5
Graduate Work Beyond Master's Degree	52	22.1

N = 235

TABLE II  
FREQUENCIES AND PERCENTAGES CONCERNING YEARS OF  
WORK EXPERIENCE WITH DISABLED PERSONS OF  
REHABILITATION PERSONNEL

Number of Years Worked	Frequency	Percentage
Less Than One Year	17	7.2
One Year	16	6.8
Two Years	17	7.2
Three Years	16	6.8
Four Years	10	4.3
Five Years	6	2.6
More Than Five Years	153	65.1

N = 235

The ATDP was first published in 1960 by Yuker, Campbell, and Block. Two additional longer forms, Forms A and B, were developed in 1962 (Yuker et al., 1970).

The ATDP is designed to measure attitudes toward physically disabled persons as a group in general, rather than specific disability groups. According to the authors, the ATDP can be used not only to measure prejudice toward disabled persons by non-disabled persons, but can be used to measure the attitudes physically disabled persons have toward themselves and their disabilities. Most researchers, however, have used the ATDP to measure attitudes toward disabled

persons as held by non-disabled persons. The ATDP is the most widely used instrument of its kind to measure attitudes toward disabled persons. Smits, Conine, and Edwards (1971, p. 227) state that "Since its development in 1960, the Attitudes Toward Disabled Persons Scale has been widely used as a research instrument." Evans states that:

The ATDP, the most widely used scale in the field of measurement of attitudes toward the disabled, has been found to be a reliable instrument ( $r = .66$  to  $.89$ ), and studies . . . support the scale as valid, based on construct validation (p. 575).

The ATDP, Form A, is a Likert-type scale containing 30 statements that refer to physically disabled persons in general. Subjects respond to each item on a six-point scale (+3 through -3) and a single total score is derived. The higher the score the more positive the attitudes toward disabled persons.

The ATDP manual states that:

. . . there have been many studies in which the reliability of the ATDP has been reported and that the net result of the studies indicate that the ATDP has a degree of reliability comparable to other attitude scales of similar length (Yuker et al., 1970, p. 33).

The test-retest reliability using 84 subjects is reported to be .78. Using the Spearman-Brown Prophecy formula, the split-half method of reliability is reported to range from .73 to .89. Equivalence reliability through "immediate parallel forms" are reported to range from .61 to .69 comparing Form A to Form O and from .60 to .83 comparing Form A to Form O. Stability-equivalence is reported to be .62 comparing Form A to Form O and from .41 to .76 comparing Form A to Form B. The reliability of the ATDP-A in the present study, using the Cronbach-Alfa formula (Nie, Hull, Jenkins, Steinbrenner, and Bent, 1975), ranged from .79 to .88 (Table III).

TABLE III  
CRONBACH ALFA RELIABILITIES OF THE ATTITUDES  
TOWARD DISABLED PERSONS SCALE -A

Rehabilitation Personnel Groups	Reliability	N
All Personnel Groups Combined	.840	235
Sheltered Workshop Personnel	.793	106
Rehabilitation Counselors	.878	101
Evaluation Center Personnel	.842	28

The authors report that the validity of the ATDP is based largely on construct validity. They state that:

To establish the validity of the test with disabled persons, validating criteria included measures of the personality, behavior, and self-concept of disabled persons. To establish the validity of the ATDP with non-disabled persons, ATDP scores were correlated with measures of prejudice, and with other variables that have been shown to be correlated with attitudes of prejudice. In some cases, similar data were collected for both disabled and non-disabled groups where similar relationships were anticipated (Yuker et al., 1970, p. 35).

Concerning the relationship between demographic variables and attitudes toward disabled persons as measured by the ATDP, the authors, based on several studies, have come to the following conclusions:

- 1.) For both non-disabled and disabled adults there is no relationship between age and acceptance of physical disability; 2.) higher levels of education result in an increase of acceptance of physical disability in both non-disabled and disabled persons of grade school; 3.) Females tend to have more positive attitudes toward disabled persons than males

in both non-disabled and disabled subjects; 4.) The degree and type of physical disability, as well age of onset, seems to be unrelated to measures of acceptance of physical disability; 5.) There is insufficient data to draw conclusions between the relationships of attitudes toward disabled persons and other demographic data such as marital status, socio-economic status, nationality and race, and urban and rural areas.

The authors report that research findings are not consistent concerning the ATDP and personality variables. However, there is some evidence that persons who have positive attitudes toward disabled persons tend to score lower on measures of need for aggression and that the need for intraception is related to acceptance of disability. Evidence suggests that non-disabled persons who score high on the ATDP are more accepting of physically disabled persons, however, it does not appear that the ATDP reflects the self-concept of disabled subjects. Anxiety appears to be related to attitudes to the disabled persons. Evidence may suggest that persons who accept physically disabled persons tend to have less anxiety. There is no evidence that interest and intelligence are related to attitudes toward disabled persons.

Subjects who report on self-report instruments may not always report their true feelings or thinking. A subject who wants the results to indicate attitudes or feelings different from what they really are may try to "fake" the test. Thus, the fakeability of self-report instruments is significant.

The fakeability of the ATDP, Form O, was measured by having a class of 61 psychology students to take the test under two conditions. The first time the test was given it was under standard conditions. However, the second time the students were instructed to try and make

the best impression as possible on the test (Yuker et al., 1970). The mean score for the first administration was 76.1 with a standard deviation of 14.00, and the mean score for the second administration was 79.2 with a standard deviation of 16.00. The correlation between the scores of the two administrations was .22. The authors state that:

The relatively low correlation indicates that an individual can distort his scores under different administrative conditions. However, the fact that the differences between means is not statistically significant suggests that the test is not particularly fakeable, since the students were not able to make responses 'fit' with the scoring key so as to earn higher scores (Yuker et al., 1970, p. 36).

Research using the ATDP indicates that the ATDP is a fairly reliable and valid instrument, and that the fakeability is apparently within tolerable limits. It is the most widely used instrument to measure attitudes toward disabled persons.

#### Demographic Questionnaire

The demographic questionnaire (Appendix B), developed by the researcher, consists of five questions relating to the variables of sex, age, educational level, contact work experience with disabled persons, and disability. The questionnaire was used in a pilot study using undergraduate students to determine if problems existed in the wording of the directions or the questions asked. Results of the pilot study indicated that no problems existed with the questionnaire.

#### Procedure

A pilot study was conducted with the complete questionnaire package using undergraduate students as subjects. Twenty-four subjects were given questionnaire packages and told to pretend they had received

them in the mail. No further instructions were given. The questionnaires were picked up by the researcher after all students had completed them. Results of the pilot study indicated no significant problems with the questionnaire package, and thus the research was carried through.

Subjects for the present study included rehabilitation counselors and rehabilitation evaluation center personnel employed by the Department of Human Services of Oklahoma and personnel of private sheltered workshops of Oklahoma. A total of 302 subjects were mailed questionnaire packages with 235 (78%) of the subjects responding with usable data. (Usable data refers to ATDP answer sheets and demographic answer sheets being completed properly.) Only three subjects responded with unusable data. Rehabilitation counselors accounted for 128 (42%) of the total subjects with 101 (79%) responding with usable data. Twenty-seven rehabilitation counselors (21%) did not respond. Rehabilitation evaluation center personnel accounted for 38 (13%) of the total subjects with 28 (74%) responding with usable data. Ten rehabilitation evaluation center personnel (26%) did not respond. A total of 28 sheltered workshops that provide services for disabled persons were asked to participate in the study. Twenty (71%) of the sheltered workshops participated. Sheltered workshop personnel accounted for 136 (45%) of the total subjects with 106 (78%) responding with usable data. Thirty sheltered workshop personnel (22%) did not respond.

Each subject was mailed a questionnaire package consisting of a cover letter (Appendix C for sheltered workshop personnel and Appendix D for rehabilitation counselors and rehabilitation evaluation

center personnel), a letter of endorsement, demographic questionnaire developed by the researcher (Appendix B), and the ATDP, Form A (Appendix A). Sheltered workshop personnel received a letter of endorsement from the President of the State Association of Sheltered Workshops and Residential Facilities. Rehabilitation counselors and rehabilitation evaluation center personnel received a letter of endorsement from the Administration of the Department of Human Services.

Subjects were first mailed questionnaire packages on October 25, 1980. A second mailing took place on November 8, 1980, to all non-respondents and a third mailing on November 22, 1980.

The cover letter (Appendix C and D) briefly explained the purpose of the study. It stated who was conducting the study and assured confidentiality. Subjects were informed the questionnaires were coded. All questionnaires mailed to sheltered workshop personnel were coded with the letters SW followed by a number to identify the respondent. Questionnaires mailed to rehabilitation counselors were coded with the letters RC, followed by a number to identify the respondent and questionnaires mailed to rehabilitation evaluation center personnel were coded with the letters VRE followed by a number to identify the respondent. Such coding allowed the researcher to identify subjects who had responded from those who had not. Included in the questionnaire packages was a stamped envelope addressed to the researcher.

#### Analysis of the Data

All five hypotheses were investigated using the one-way analysis of variance (ANOVA). The ANOVA allows the researcher to compare two

or more means to determine if significant differences exist between or among them when score data is being tested for significant differences (Bartz, 1976). The minimum requirement for significance was set at a per comparison error rate of  $p < .05$ . An error rate of  $p < .05$  was selected in order to reduce the probability of making Type II errors, which is failing to reject false null hypotheses (Linton and Gallo, 1975).

## CHAPTER IV

### RESULTS

#### Introduction

The purpose of Chapter IV is to present the findings of the statistical analysis for the five research questions generated in the present study. The purpose of the study was to determine if attitudinal differences existed toward disabled persons among rehabilitation counselors, rehabilitation evaluation center personnel, and sheltered workshop personnel; between professional and non-professional sheltered-workshop personnel; and to identify demographic variables that may be associated with attitudes toward disabled persons. The results of the analysis provide information concerning attitudes toward disabled persons held by rehabilitation personnel and association with selected demographic variables. The data was examined using the one-way analysis of variance.

#### Results of Analysis

The research questions will be discussed in terms of the analysis of the data.

Question One: Are there differences in attitudes toward disabled persons expressed by different rehabilitation personnel groups? No significant differences were found in attitudes toward disabled persons

expressed by rehabilitation counselors, rehabilitation evaluation center personnel, and sheltered workshop personnel ( $F_{2,232} = .657$ ,  $p = .5193$ ; Table IV). Thus, Question One was answered in the negative and Hypothesis One is not rejected. Mean and standard deviation scores are reported in Table V.

TABLE IV  
SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE:  
ATTITUDES TOWARD DISABLED PERSONS  
EXPRESSED BY REHABILITATION  
PERSONNEL GROUPS

Source	SS	df	MS	F	p
Between Groups	647.008	2	323.504	0.657	.5193
Within Groups	114221.485	232	492.334		

$p < .05$

Question Two: Are there differences in attitudes toward disabled persons expressed by professional and non-professional sheltered workshop personnel? No significant difference was found in attitudes toward disabled persons expressed by professional and non-professional sheltered workshop personnel ( $F_{1,104} = .381$ ,  $p = .3642$ ; Table VI). Therefore, Question Two was answered in the negative and Hypothesis Two is not rejected. Mean and standard deviation scores are reported in Table VII.

TABLE V  
MEAN AND STANDARD DEVIATION SCORES ON ATDP OF  
REHABILITATION PERSONNEL GROUPS

Rehabilitation Group(s)	N	$\bar{X}$	sd
All Rehabilitation Groups	235	123.179	22.156
Sheltered Workshop Personnel	106	122.141	20.040
Rehabilitation Counselors	101	123.059	24.540
Rehabilitation Evaluation Center Personnel	28	127.536	20.936

N= 235

TABLE VI  
SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE:  
ATTITUDES TOWARD DISABLED PERSONS  
EXPRESSED BY PROFESSIONAL  
SHELTERED WORKSHOP  
PERSONNEL

Source	SS	df	MS	F	p
Between Groups	334.168	1	334.168	0.831	.3642
Within Groups	41832.710	104	402.238		
Total	42166.878	105			

$p < .05$

TABLE VII  
MEAN AND STANDARD DEVIATION SCORES ON ATDP OF  
PROFESSIONAL AND NON-PROFESSIONAL  
SHELTERED WORKSHOP PERSONNEL

Sheltered Workshop Personnel	N	$\bar{X}$	sd
Both Personnel Groups	106	122.141	20.040
Professional Personnel	31	124.903	24.021
Non-Professional Personnel	75	121.000	18.204

N = 106

Question Three: Does education level make a difference in attitudes toward disabled persons? No significant differences were found between attitudes toward disabled persons and the different levels of education ( $F_{4,230} = 1.533$ ,  $p = .1934$ ; Table VIII). Thus, Question Three was answered in the negative and Hypothesis Three is not rejected. Mean and standard deviation scores are reported in Table IX.

Question Four: Does amount of work experience with disabled persons make a difference in attitudes toward disabled persons? No significant difference was found in attitudes toward disabled persons between rehabilitation personnel who had five years or less work experience with disabled persons and rehabilitation personnel who had more than five years experience working with disabled persons ( $F_{1,233} = .223$ ,  $p = .6369$ ; Table X). Therefore, Question Four was answered in the negative and Hypothesis Four is not rejected. The mean and standard deviation scores are reported in Table XI.

TABLE VIII

SUMMARY TABLE FOR ANALYSIS OF VARIANCE: ATTITUDES TOWARD DISABLED PERSONS EXPRESSED BY REHABILITATION PERSONNEL WITH DIFFERENT EDUCATIONAL LEVELS

Source	SS	df	MS	F	p
Between Groups	2982.730	4	745.682	1.533	.1934
Within Groups	111885.764	230	486.460		
Total	114868.494	234			
p<.05					

TABLE IX

MEAN AND STANDARD DEVIATION SCORES ON ATDP OF REHABILITATION PERSONNEL WITH DIFFERENT EDUCATIONAL LEVELS

Educational Level	N	$\bar{X}$	sd
One Year of College or Less	39	121.051	18.899
Two Years of College to Bachelor's Degree	43	121.345	18.612
Bachelor's Degree Plus 12 Graduate hours to Master's Degree in Rehabilitation Counseling or Special Education	46	130.370	19.186
Master's Degree in Educational Psychology, Psychology, Sociology, Social Work, etc.	55	121.218	26.758
Graduate Work Beyond Master's Degree	52	122.000	23.654

N=235

TABLE X

SUMMARY TABLE FOR ANALYSIS OF VARIANCE: ATTITUDES  
TOWARD DISABLED PERSONS AND WORK EXPERIENCE

Source	SS	df	MS	F	p
Between Groups	110.064	1	110.064	0.223	.6369
Within Groups	114758.429	233	492.525		
Total	114868.48	234			

$p < .05$

TABLE XI

MEAN AND STANDARD DEVIATION SCORES ON ATDP OF RE-  
HABILITATION PERSONNEL AND WORK EXPERIENCE

Amount of Work Experience	N	$\bar{X}$	sd
Five Years Experience or Less	82	122.2439	19.0474
More Than Five Years Experience	153	123.6797	23.6992

N = 235

Question Five: Are there differences in attitudes toward disabled persons expressed by disabled and non-disabled rehabilitation personnel? No significant difference was found in attitudes toward disabled persons between disabled and non-disabled rehabilitation personnel ( $F_{1,233} = 1.504$ ,  $p = .2213$ ; Table XII). Thus, Question Five was answered in the negative and Hypothesis Five is not rejected. Mean and standard deviation scores are reported in Table XIII.

TABLE XII

SUMMARY TABLE OF ANALYSIS OF VARIANCE: ATTITUDES  
TOWARD DISABLED PERSONS EXPRESSED BY DISABLED  
AND NON-DISABLED REHABILITATION PERSONNEL

Source	SS	df	MS	F	p
Between Groups	736.597	1	736.597	1.504	.2213
Within Groups	114131.896	233	489.836		

$p < .05$

#### Summary

Findings indicate the five research questions were answered in the negative and the hypotheses were not rejected. Chapter V will present the summary and conclusion of the present study as well as a discussion of the implications.

TABLE XIII

MEAN AND STANDARD DEVIATION SCORES ON ATDP BY  
DISABLED AND NON-DISABLED REHABILITATION  
PERSONNEL

Rehabilitation Personnel	N	$\bar{X}$	sd
Disabled Personnel	52	126.5	23.2889
Non-Disabled Personnel	183	122.2350	21.7971

N = 235

## CHAPTER V

### SUMMARY AND CONCLUSIONS

#### Summary of the Investigation

The present study examined attitudes toward disabled persons expressed by three rehabilitation personnel groups in Oklahoma. The groups included rehabilitation counselors and rehabilitation evaluation center personnel employed by the Department of Human Services, and sheltered workshop personnel employed by private sheltered workshops. A total of 235 subjects participated in the study (101 rehabilitation counselors; 28 rehabilitation evaluation center personnel and 106 sheltered workshop personnel). In addition, the investigation attempted to determine if selected demographic variables (educational level, amount of work experience with disabled persons, and disability) were related to attitudes toward disabled persons.

Subjects were mailed questionnaire packages containing a cover letter, a letter of endorsement, the ATDP (Form A), a demographic sheet, and a stamped addressed envelope to be returned to the researcher. The response rate for all three rehabilitation personnel groups was 78 percent. The data gathered was analyzed using the one-way analysis of variance procedure with the minimum requirement for significance set at a per comparison error rate of  $p < .05$ .

### Summary and Conclusions

In the present study, five hypotheses were tested. The hypotheses are as follows:

Hypothesis One: There are no differences in attitudes toward disabled persons among rehabilitation counselors, rehabilitation evaluation center personnel, and sheltered workshop personnel as measured by the ATDP. The hypothesis was not rejected since no significant differences were found in attitudes toward disabled persons among the three rehabilitation groups. The results do not support the findings of Bell (1962) and Crunk (1975) and were somewhat unexpected since rehabilitation counselors and rehabilitation evaluation center personnel are required to have a master's degree or equivalent and sheltered workshop personnel are not.

Hypothesis Two: There are no differences in attitudes toward disabled persons between professional and non-professional sheltered workshop personnel as measured by the ATDP. The hypothesis was not rejected since no significant difference in attitudes toward disabled persons was determined between professional and non-professional sheltered workshop personnel. The author is unaware of any research findings concerning the attitudes of sheltered workshop personnel toward disabled persons. However, the findings of Greenleigh Associates (1975) and Kimberly (1967) may indicate that such attitudinal differences exist.

Hypothesis Three: There are no differences in attitudes toward disabled persons between rehabilitation personnel who have higher levels of education and rehabilitation personnel who have low levels

of education as measured by the ATDP. No significant differences in attitudes toward disabled persons were found among the different educational levels. Therefore, the hypothesis was not rejected. The results support the findings of Bell (1962), but contradict the findings of Golin (1970), Horowitz et al., (1965), Siller (1964), and Webster (1967), whose findings indicate that education leads to positive attitudes toward disabled persons. The present findings also contradict the findings of Cohen (1963), Conine (1968), and Palmerton and Frumkin (1969a) whose research indicates that higher levels of education may result in negative attitudes toward disabled persons.

Hypothesis Four: There are no differences in attitudes toward disabled persons between rehabilitation personnel who have had five years or less contact experience in working with disabled persons and rehabilitation personnel who have had more than five years of contact experience in working with disabled persons as measured by the ATDP. Again, no significant difference was found in attitudes toward disabled persons between rehabilitation personnel who have had five years or less work experience and those who have had more than five years work experience. Thus, the hypothesis was not rejected. The Present findings support the results of Bishop (1969), Dickie (1967), Drude (1971), Novick (1972), and Wallston and Robinson (1972). However, the present findings contradict the results of Anthony (1969), Conine (1968), Golin (1970), and Palmerton and Frumkin (1969a).

Hypothesis Five: There are no differences in attitudes toward disabled persons between rehabilitation personnel who have a physical disability and rehabilitation personnel who do not have a physical disability. The hypothesis was not rejected since no significant

difference was found between disabled and non-disabled rehabilitation personnel. The present findings support that of Drude (1971) and Hedgeman (1971).

### Limitations

Questionnaire studies are often criticized. However, the criticisms are often related to their misuse, and not their use. Well developed questionnaires have some advantages over other methods of collecting data. In comparing the questionnaire method to the interviewing method, the questionnaire requires less time, is less expensive, and allows collection of data from larger samples (Gay, 1976).

Although questionnaires have the above advantages, there are also some disadvantages. The cover letter of the present study alerted the subjects to what the researcher was looking for (attitudes toward disabled persons). Therefore, subjects, as Comer and Piliavian (1975) have pointed out, may have found it threatening to express their true attitudes toward disabled persons and may have expressed attitudes they thought the researcher would approve of.

Getting good return rates in questionnaire studies is often a problem. According to Gay (1975) if the response rate is below 70 percent there may be a problem with generalizability. Seventy-eight percent of the subjects responded to the questionnaire packages of the present study with 22 percent of the subjects not responding. Thus, the 22 percent (27 rehabilitation counselors, 10 rehabilitation evaluation center personnel, and 30 sheltered workshop personnel) who did not respond may have different attitudes toward disabled persons than the 78 percent who did respond. Attitudes of the non-respondents

may be more positive or more negative than indicated by the respondents.

### Discussion

Results of the present study indicate that differences in attitudes toward disabled persons do not exist among rehabilitation counselors, rehabilitation evaluation center personnel, and sheltered workshop personnel in Oklahoma as measured by the ATDP. The present findings do not support the results of Bell (1962) and Crunk (1975), who found that attitudes toward disabled persons existed between different rehabilitation groups, and were not expected by the researcher. In order to be employed by the Department of Human Services as a rehabilitation counselor or evaluation center personnel, one must hold a master's degree or equivalent. Sheltered workshop personnel, on the other hand, are not usually required to hold a college degree at any level. Also, rehabilitation personnel employed by the Department of Human Services are more likely to receive in-service training than sheltered workshop personnel. However, some in-service training is provided for sheltered workshop personnel, but such training is limited and not all workshop personnel are allowed or able to attend such training.

Findings of the present study indicate that no differences exist in attitudes toward disabled persons among the three rehabilitation personnel groups. All three rehabilitation personnel groups expressed only average attitudes toward disabled persons, which was unexpected by the researcher, as compared to other norms groups of the ATDP scales reported by Yuker et al. (1970) and Block (1974), see Table XIV. Such findings may indicate that all three rehabilitation personnel groups

could benefit from more and better in-service or pre-service training. One possible explanation for the present findings is that although rehabilitation personnel employed by the Department of Human Services are required to hold a master's degree or equivalent, approximately 85 percent of such personnel hold degrees in areas other than rehabilitation counseling and special education. However, a master's degree in rehabilitation counseling or special education does not guarantee positive attitudes toward disabled persons.

TABLE XIV  
NORMATIVE DATA OF ATDP SCALES

Form	Subjects	Sex	Mean	Sd	N
A	Disabled Persons	M	120.43	24.0	191
A	Disabled Persons	F	123.58	22.65	103
A	Non-disabled Persons	M	106.65	20.73	337
A	Non-disabled Persons	F	114.18	20.48	405
B	Graduate Students	M	126.8	19.6	37
B	Graduate Students	F	126.6	18.6	23
B	Undergraduate Students	M	109.8	20.2	39
B	Undergraduate Students	F	114.9	24.1	42
B	Typist	F	125.5	21.4	50
B	Airline Stewardesses	F	102.0	18.6	50

Findings of the present study indicate that differences in attitudes toward disabled persons between professional and non-professional sheltered workshop personnel do not exist as measured by the ATDP. Again, such results were not expected by the researcher. Although professional degrees in rehabilitation related areas do not guarantee positive attitudes, one possible explanation is that some workshop personnel who were classified as professional did not hold such professional degrees. Such personnel were classified professional if they were awarded a total of 13 points. Personnel received two points for each year of college completed and one point for each year of work experience up to a maximum of five years (see Chapter I). Thus, one could be classified as professional if four years of college had been completed in any area of specialization and if one had five years of work experience with disabled persons. It is possible that a different scheme of classifying professional from non-professional may lead to a significant difference in attitudes toward disabled persons between professional and non-professional sheltered workshop personnel.

Results indicate no difference exists in attitudes toward disabled persons between rehabilitation personnel who had higher levels of education and those who had lower levels of education. The results support the findings of Bell (1962) but contradict all other findings. One possible explanation for the outcome may be due to the way the educational levels had to be broken down in order to be analyzed. Personnel with master's degrees in rehabilitation counseling or special education were classified with personnel who had a bachelor's degree plus 12 or more graduate hours. The classification represented 19.6 percent of the total subjects with personnel with master's degrees

in rehabilitation counseling or special education representing 14.9 percent of the total subjects.

Findings of the present study indicate that differences in attitudes toward disabled persons between rehabilitation personnel who have worked five years or less with disabled persons and rehabilitation personnel who have worked more than five years with disabled persons do not exist as measured by ATDP. The results support the findings of Bishop (1969), Dickie (1967), Drude (1971), Novick (1972), and Wallston and Robinson (1972). The results, however, also contradict the findings of Anthony (1969), Conine (1968), Golin (1970), and Palmerton and Frumkin (1969b). The findings may have been influenced by the way years of work experience had to be categorized in order to be analyzed. One hundred fifty-three (65%) of the subjects had more than five years work experience with disabled persons. Although no differences were found between rehabilitation personnel who had five years or less of work experience compared to more than five years of work experience, supplemental findings of the present study using the Tukey HSD follow-up test (Linton and Gallo, 1975), indicate that differences in attitudes toward disabled persons exist between rehabilitation personnel who have worked less than one year and those who have worked three years with disabled persons (Tables XV and XVI). However, no significant differences were found between personnel who had worked less than one year and those who had worked four or five years with disabled persons.

TABLE XV  
ANALYSIS OF VARIANCE OF ATDP FOR YEARS OF WORK  
EXPERIENCE FIVE YEARS OR LESS

Sources	SS	df	MS	F	p
Between Groups	4664.647	5	932.929	* 2.868	.02
Within Groups	24722.475	76	325.296		
Total	29387.122	81			

\*  $p < .05$

TABLE XVI  
DIFFERENCES IN ATDP SCORES FOR DIFFERENT  
YEARS OF WORK EXPERIENCE USING THE  
TUKEY HSD TEST

Years of Experience	$\bar{X}_1$	$\bar{X}_2$	$\bar{X}_3$	$\bar{X}_4$	$\bar{X}_5$	$\bar{X}_6$
Less than one 111.6471	....	8.9154	7.7647	*22.4154	13.1529	17.3529
One 120.5625	....	.....	1.1507	13.5	4.2375	8.4375
Two 119.4118	....	....	....	14.6507	5.3882	9.5882
Three 134.0625	....	....	....	....	9.2625	5.0625
Four 124.8000	....	....	....	....	....	4.2
Five 129.0000	....	.....	....	....	....	....

\*  $p < .05$

Results of the present study indicate no differences exist in attitudes toward disabled persons between disabled and non-disabled rehabilitation personnel as measured by the ATDP. Such results support the findings of Drude (1971) and Hedgeman (1971). One possible explanation for the outcome is that the severity of the disability was not established. Subjects were classified disabled if they reported that they had any type of physical disability with the exception of visual handicaps and blindness.

Although the supplemental findings of the present study do not contribute evidence to support or reject the stated hypotheses, such findings will be briefly discussed. Research findings indicate that females have either more positive attitudes toward disabled persons than males (Conine, 1968; Dickie, 1967; Jabin, 1966; Yuker et al., 1970), or that differences do not exist in attitudes toward disabled persons between males and females (Bishop, 1969; Dickie, 1971; Mader, 1967). The present investigation indicates that differences do not exist ( $F_{1,231} = 1.142, p = .2864$ ) in attitudes toward disabled persons between male and female rehabilitation personnel. The mean score for males was 121.87 and 125.02 for females.

Spearman correlation coefficients were calculated using the ATDP with educational level, years of work experience with disabled persons, and age. The findings indicate that the correlations of the three variable pairs were non-significant. Spearman correlation coefficients were also calculated using educational level with work years of experience with disabled persons and age, and work years of experience with age. Significant correlations, as expected, were found with the three variable pairs.

### Implications

Results of the present study indicate that no differences exist in attitudes toward disabled persons, as measured by the ATDP, among rehabilitation counselors, rehabilitation evaluation center personnel, and sheltered workshop personnel. However, the attitudes toward disabled persons held by all three rehabilitation personnel groups are somewhat more negative than expected. Since the findings of Krauft et al., (1975) indicate that such attitudes may be a factor in whether or not disabled persons are rehabilitated, rehabilitation administrators and sheltered workshop directors may want to provide additional pre-service and/or in-service attitudinal training for their personnel.

One purpose of the present study was to identify demographic variables that may have relationships with attitudes toward disabled persons. Such information could have been beneficial to rehabilitation administrators and sheltered workshop directors in selecting future personnel. However, findings of the present study indicate that differences do not exist in attitudes toward disabled persons among rehabilitation personnel with different levels of education and between disabled and non-disabled rehabilitation personnel, as measured by the ATDP. Such information does not appear to be helpful to rehabilitation administrators and sheltered workshop directors in selecting future personnel. Findings do indicate that rehabilitation personnel who have had three years experience in working with disabled persons have significantly more positive attitudes toward disabled persons, as measured by the ATDP, than personnel who have had less than one year experience (no other significant differences were found among other different levels of work experience). Thus, rehabilitation administrators and

sheltered workshop directors may want to select future personnel who have had three years previous experience in working with disabled persons if possible.

The findings of the present study may be unexpected by educators who provide pre-service and in-service training in the area of rehabilitation counseling and special education. Such educators may want to take a critical look at the curriculum and methods of training they are providing.

### Recommendations

The following recommendations are based on the findings of the present study:

1. Further research concerning attitudes toward disabled persons is recommended. Not only should rehabilitation personnel participate, but also a sample of the general population, social workers, social security personnel, different occupational groups, and employers of Oklahoma. Such research would indicate whether or not rehabilitation personnel have more positive attitudes toward disabled persons than other groups in Oklahoma, and may clarify whether the demographic variables of educational level, years of work experience with disabled persons, and disability are related to attitudes toward disabled persons.

2. Findings of the present study indicate that no significant differences exist in attitudes toward disabled persons among the three rehabilitation personnel groups and that the attitudes expressed were about average as compared to other occupational and student groups reported by Yuker et al. (1970) and Block (1974). Thus, although some

in-service and pre-service training is provided for the three rehabilitation personnel groups, additional in-service and/or pre-service training emphasizing attitudes toward disabled persons is recommended. The in-service training should not only take place at the university, but at the different rehabilitation centers and sheltered workshops as well. It is recommended that all personnel who have direct work contact with disabled persons take part in such training.

3. Further research is recommended concerning education and attitudes toward disabled persons. Education should be broken down into emphasis or major areas (psychology, special education, rehabilitation counseling, etc.) instead of how many years of education or what level of degree is held. Research is recommended concerning the attitudes toward disabled persons held by people who complete training programs in the areas of rehabilitation counseling and special education. If the attitudes of the people who complete such training programs are no different from those who complete training programs non-related to rehabilitation or special education, then a critical look at the screening procedures of the rehabilitation counseling and special education programs is suggested as well as the curriculum and methods of such training programs.

4. Further research is recommended concerning attitudes toward disabled persons and rehabilitation personnel. Physical disability should be broken down into specific physical disabilities. The purpose of the ATDP is to measure general attitudes toward disabled persons. Therefore, the ATDP could be modified for the purpose, or a new instrument could be developed. It is also suggested that a close look

be taken at the ATDP as an "all purpose" measure of attitudes toward disabled persons.

### Summary

A summary of the findings of the present study along with conclusions that could be drawn from the results were presented. Implications of the findings and recommendations for future research were also presented.

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## APPENDIXES

APPENDIX A

THE ATTITUDES TOWARD DISABLED PERSONS SCALE

ATDP SCALE (FORM A)

CODE # \_\_\_\_\_

ATDP SCALEANSWER SHEET  
FORM A

Use this answer sheet to indicate how much you agree or disagree with each of the statements about physically disabled people on the attached list. (Physically disabled refers to all physical disabilities with the exception of visual impairment and blindness.) Put an "X" through the appropriate number from +3 to -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

PLEASE ANSWER EVERY ITEM

(1) -3 -2 -1 +1 +2 +3	(16) -3 -2 -1 +1 +2 +3
(2) -3 -2 -1 +1 +2 +3	(17) -3 -2 -1 +1 +2 +3
(3) -3 -2 -3 +1 +2 +3	(18) -3 -2 -1 +1 +2 +3
(4) -3 -2 -1 +1 +2 +3	(19) -3 -2 -1 +1 +2 +3
(5) -3 -2 -1 +1 +2 +3	(20) -3 -2 -1 +1 +2 +3
(6) -3 -2 -1 +1 +2 +3	(21) -3 -2 -1 +1 +2 +3
(7) -3 -2 -1 +1 +2 +3	(22) -3 -2 -1 +1 +2 +3
(8) -3 -2 -1 +1 +2 +3	(23) -3 -2 -1 +1 +2 +3
(9) -3 -2 -1 +1 +2 +3	(24) -3 -2 -1 +1 +2 +3
(10) -3 -2 -1 +1 +2 +3	(25) -3 -2 -1 +1 +2 +3
(11) -3 -2 -1 +1 +2 +3	(26) -3 -2 -1 +1 +2 +3
(12) -3 -2 -1 +1 +2 +3	(27) -3 -2 -1 +1 +2 +3
(13) -3 -2 -1 +1 +2 +3	(28) -3 -2 -1 +1 +2 +3
(14) -3 -2 -1 +1 +2 +3	(29) -3 -2 -1 +1 +2 +3
(15) -3 -2 -1 +1 +2 +3	(30) -3 -2 -1 +1 +2 +3

ATDP SCALE (FORM A)

READ EACH STATEMENT AND PUT AN "X" IN THE APPROPRIATE COLUMN ON THE ANSWER SHEET. DO NOT MAKE ANY MARKS ON THE QUESTION SHEETS.

PLEASE ANSWER EVERY QUESTION

---

1. Disabled people are often unfriendly.
2. Disabled people should not have to compete for jobs with physically normal persons.
3. Disabled people are more emotional than other people.
4. Most disabled persons are more self-conscious than other people.
5. We should expect just as much from disabled as from non-disabled persons.
6. Disabled workers cannot be as successful as other workers.
7. Disabled people usually do not make much of a contribution to society.
8. Most non-disabled people would not want to marry anyone who is physically disabled.
9. Disabled people show as much enthusiasm as other people.
10. Disabled persons are usually more sensitive than other people.
11. Severely disabled persons are usually untidy.
12. Most disabled people feel that they are as good as other people.
13. The driving tests given to a disabled person should be more severe than the one given to non-disabled.
14. Disabled people are usually sociable.
15. Disabled people usually are not as conscientious as physically normal persons.
16. Severely disabled persons probably worry more about their health than those who have minor disabilities.
17. Most disabled persons are not dissatisfied with themselves.
18. There are more misfits among disabled persons than among non-disabled persons.

ATDP SCALE (FORM A)

19. Most disabled persons do not get discouraged easily.
20. Most disabled persons resent physically normal people.
21. Disabled children should compete with physically normal children.
22. Most disabled persons can take care of themselves.
23. It would be best if disabled persons would live and work with non-disabled persons.
24. Most severely disabled people are just as ambitious as physically normal persons.
25. Disabled people are just as self-confident as other people.
26. Most disabled persons want more affection and praise than other people.
27. Physically disabled persons are often less intelligent than non-disabled ones.
28. Most disabled persons are different from non-disabled people.
29. Disabled persons don't want any more sympathy than other people.
30. The way disabled people act is irritating.

APPENDIX B

DEMOGRAPHIC INFORMATION SHEET

## DEMOGRAPHIC INFORMATION SHEET

Randal R. Elston, 87-11 S. University Place,  
Stillwater, Oklahoma 74074

For each question asked, place an X on the number that best describes you or fill in the blank.

1. Are you:
  - a. Male.....(1)
  - b. Female.....(2)
2. What is your age?.....
3. Do you have a physical disability?
  - a. No.....(1)
  - b. Yes.....(2)

If yes, briefly describe \_\_\_\_\_
4. What is your highest academic level?
  - a. High school diploma or less.....(1)
  - b. One year of college.....(2)
  - c. Two years of college.....(3)
  - d. Three years of college.....(4)
  - e. Four years of college (no degree).....(5)
  - f. Bachelor's degree.....(6)
  - g. Bachelor's degree plus 12 hours of graduate work.....(7)
  - h. Bachelor's degree plus one year of graduate work.....(8)
  - i. Master's degree in rehabilitation counseling, or special education.....(9)
  - j. Master's degree in educational psychology, sociology or social work.....(10)
  - k. Master's degree in other areas (business, industrial art, etc.).....(11)
  - l. Graduate work beyond Master's degree.....(12)
5. How long have you worked with disabled or handicapped persons?
  - a. Less than one year.....(1)
  - b. One year.....(2)
  - c. Two years.....(3)
  - d. Three years.....(4)
  - e. Four years.....(5)
  - f. Five years.....(6)
  - g. More than five years.....(7)

## APPENDIX C

COVER LETTER: SHELTERED WORKSHOP PERSONNEL

November 10, 1980

Dear Colleague:

With full endorsement of the president of the Oklahoma Association of Workshops and Group Home Facilities, my doctoral research involves a study of attitudes toward physically disabled persons held by rehabilitation personnel (sheltered workshop personnel, rehabilitation counselors, evaluators, and psychometrists) in Oklahoma.

I am contacting you because I feel your opinion is important. Your participation in the study will result in findings which may aid sheltered workshop directors and rehabilitation administrators in selecting future rehabilitation personnel and training, and will help to insure that such quality people, such as yourself, will be maintained in providing rehabilitation services for disabled and handicapped persons.

You will notice a number at the top of each answer sheet. The numbers are used for follow-up purposes and will insure that you will not be sent a follow-up letter once you have responded. All responses will be kept in confidence and all data handled anonymously. Results of the study will be made available to you at your request.

The materials you are to complete will require approximately 15 to 30 minutes of your time. When you have completed the tasks, place the two answer sheets in the stamped envelope provided. Please make your return as promptly as possible. Thank you.

Sincerely,

Randal R. Elston, OSU Doctoral Student  
87-11 S. University Place  
Stillwater, Oklahoma 74074  
Phone: 405/377-4508

**APPENDIX D**

**COVER LETTER; REHABILITATION COUNSELORS AND  
EVALUATION CENTER PERSONNEL**

November 28, 1980

Dear Colleague:

With approval from Mr. Lowell E. Green, Executive Assistant with the Department of Human Services and full endorsement of the President of the Oklahoma Association of Workshops and Group Home Facilities, my doctoral research involves a study of attitudes toward physically disabled persons held by rehabilitation personnel (rehabilitation counselors, evaluators, psychometrists, and sheltered workshop personnel) in Oklahoma.

I am contacting you because I feel your opinion is important. Your participation in the study will result in findings which may aid rehabilitation administrators and sheltered workshop directors in selecting future rehabilitation personnel and training, and will help to insure that quality people, such as yourself, will be maintained in providing rehabilitative services for disabled persons.

You will notice a number at the top of each answer sheet. The numbers are used for follow-up purposes and will insure that you will not be sent a follow-up letter once you have responded. All responses will be kept in confidence and all data handled anonymously. Results of the study will be made available to you at your request.

The materials you are to complete will require approximately 15 to 30 minutes of your time. When you have completed the tasks, place the two answer sheets in the stamped envelope provided. Please make your return as promptly as possible. Thank you.

Sincerely,

Randal R. Elston, OSU Doctoral Student  
87-11 S. University Place  
Stillwater, Oklahoma 74074  
Phone: 405/377-4508

APPENDIX E

SHELTERED WORKSHOPS THAT PARTICIPATED  
IN THE STUDY

ARC Industries  
Bartlesville, Oklahoma 74003

Chickasha Opportunity Workshop  
Chickasha, Oklahoma 73018

Dale Rogers Training Center  
Oklahoma City, Oklahoma 73107

Durant Sheltered Workshop  
Durant, Oklahoma 74701

Edmond Activity Center  
Edmond, Oklahoma 73034

Faith-7 Activity Center  
Shawnee, Oklahoma 74801

Goodwill Industries of  
South West Oklahoma  
Lawton, Oklahoma 73501

Midwestern Rehabilitation Center  
Burns Flat, Oklahoma 73624

Muskogee Goodwill Industries  
Muskogee, Oklahoma 74401

Oklahoma City Goodwill Industries, Inc.  
Oklahoma City, Oklahoma 73125

Oklahoma School for Retarded and  
Handicapped  
Okmulgee, Oklahoma 74447

Opportunity Center  
Ponca City, Oklahoma 74601

Opportunity School  
Enid, Oklahoma 73701

Payne County Sheltered Workshop  
Stillwater, Oklahoma 74074

Quality Enterprises, Inc.  
Oklahoma City, Oklahoma 73104

Riverview Opportunity Center  
Jenks, Oklahoma 74037

Rogers County Activity Center  
Clarmore, Oklahoma 74107

Shop  
Tulsa, Oklahoma 74150

Sunshine Industries  
Ardmore, Oklahoma 73401

Vocational Training Center  
Tulsa, Oklahoma 74105

VITA<sup>2</sup>

Randal R. Elston

Candidate for the Degree of  
Doctor of Education

Thesis: ATTITUDES TOWARD DISABLED PERSONS AS EXPRESSED BY STATE AND  
PRIVATE REHABILITATION PERSONNEL

Major Field: Educational Psychology

Biographical:

Personal Data: Born at Rocky, Oklahoma, November 30, 1948, the  
son of Mr. and Mrs. L. L. Elston.

Education: Graduated from Hobart High School, Hobart, Oklahoma,  
in May, 1967; received Bachelor of Arts degree in Human  
Resources from East Central Oklahoma State University in  
1976; received Master of Science degree in Psychology -  
Rehabilitation Counseling from Oklahoma State University in  
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Professional Experience: Vocational Rehabilitation Evaluator,  
Oklahoma Rehabilitative Services, Burns Flat, Oklahoma,  
1977-1980; graduate research associate, Department of  
Applied Behavioral Studies, Oklahoma State University, 1980;  
graduate teaching associate, Department of Applied  
Behavioral Studies, Oklahoma State University, 1980; program  
coordinator, Midwestern Rehabilitation Center, Burns Flat,  
Oklahoma, January, 1981 to present; member of American  
Personnel and Guidance Association.