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Attitudes toward disability in occupational therapy students

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**ATTITUDES TOWARD DISABILITY IN OCCUPATIONAL
THERAPY STUDENTS**

A Thesis

Presented to

The Department of Occupational Therapy
San Jose State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

by

Linda Marie Plachy

December, 1995

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ABSTRACT

Attitudes Toward Disability in Occupational Therapy Students

by Linda Marie Plachy

The Attitudes Toward Disabled Persons Scale-Form B (Yuker, Block, & Young, 1966) was used to measure the attitudes toward disability in 103 occupational therapy students at San Jose State University. The mean attitude scores of the following groups were compared: 1) occupational therapy and business students (Oberle, 1975); 2) first and fourth semester occupational therapy students; 3) occupational therapy students with and without disabilities; and 4) three sub-groups of occupational therapy students who reported different types of disabilities (physical, psychiatric, and learning disabilities). Results indicated no difference between occupational therapy and business students, no significant difference between the first and fourth semester students, and no significant difference between the groups of students with and without disabilities. A difference was noted in attitude scores among students in three sub-groups of disability. Students with physical disabilities had more positive attitudes and students with psychiatric disabilities had less favorable attitudes compared to the student population mean.

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CHAPTER 1

INTRODUCTION

Purpose

This study examined San Jose State University (S.J.S.U.) Department of Occupational Therapy students' attitudes toward disability. It examined how attitudes toward disability differ between students who identify themselves as having disabilities and those who do not have disabilities. It also studied the differences in attitude toward disability according to the type of disability the student reported having. In addition, this study compared the attitudes of occupational therapy students as a group to a sample of business administration students from a similar study (Oberle, 1975) to determine how the students' attitudes related to the attitudes of students in a non-health related field. Education level was considered in reviewing these students' attitudes to examine what effect, if any, progressing through the occupational therapy curriculum had on attitudes toward disability.

The present study investigated the effects these variables had on attitudes toward disability. The findings enabled the researcher to examine what factors contribute to positive attitudes which could enhance treatment of clients in occupational therapy practice.

Statement of the Problem

Occupational therapists value their clients' quality of life and independence. In theory, the occupational therapist should view the person with

a disability holistically, emphasizing the individual's strengths and abilities while working with disabilities (Benham, 1988). Occupational therapists have an ethical responsibility to view their clients with such positive regard. This responsibility is innate to the roots of the profession and has existed throughout its history, ever since the concept of moral treatment first arose (Yerxa, 1980).

One might assume that health care workers' attitudes toward people with disabilities would be innately positive (Benham, 1988). This is, in fact, not always the case (Belinsky, 1972; Duckworth, 1988; Lyons, 1991). Some authors have questioned the effectiveness of health care educational programs in facilitating more positive attitudes toward disability. This is due to the fact that many programs focus on clients' inadequacies and differentness (Donaldson, 1980; Lyons, 1991; Wright, 1980) instead of emphasizing abilities and identifying with the individual outside of the client-therapist relationship (Donaldson, 1980; Lyons, 1991; Wolfensberger, 1983). One aspect of the present study examined the possibility of this effect in the occupational therapy department at S.J.S.U. Students' level of education in the occupational therapy curriculum was considered in examining attitudes toward people with disabilities.

Makas (1988) demonstrated how perceptions of positive attitudes differ between people with disabilities and those who do not have disabilities in the general population. She found that these differences often lead to misunderstandings and strained relationships between people in these two groups. The present study also examined the attitudes toward disability in occupational therapy students with and without disabilities. In reviewing the

occupational therapy literature, no previous research was found that examined the differences between occupational therapy students with and without disabilities. The present study also examined the attitudes of occupational therapy students as a whole compared to a normative sample.

Several authors have emphasized how health care workers' negative attitudes can impact clients' self concepts and lifestyle choices (Benham, 1988; Lyons, 1991; Peloquin, 1993; Schlaff, 1993). Therefore, examination of attitudes toward disability in students of occupational therapy is important to the future treatment of clients in this field that claims to have an ethical responsibility to regard clients in a positive light.

Null Hypotheses

The following null hypotheses were tested:

1. There will not be a difference in scores on an attitude questionnaire between occupational therapy students at S.J.S.U. and a sample of business undergraduates from a similar study (Oberle, 1975).
2. There will not be a significant difference in scores on the attitude questionnaire among students in their first semester and fourth semester of occupational therapy classes.
3. There will not be a significant difference in scores on the attitude questionnaire between students with disabilities and those without disabilities.
4. There will not be a difference in scores on an attitude questionnaire between students with disabilities according to the type of disability that they have.

Definitions

Conceptual Definitions

Able-bodied person: A person who has an able body, i.e. one free from physical disability, which is capable of the physical exertion required of it (Simpson & Weiner, 1989).

Attitude: The “degree of affect toward or against an object or value” (Allport, 1935, p. 10); in this case the object is a person with a disability.

Disability: Any constraint or lack of ability to perform an activity in the range considered appropriate for able-bodied people (Wood, 1980).

Handicap: The social disadvantage that results from a disability; it is not the individual with a disability that has the handicap, it is the social consequences and restrictions placed on that person that create a handicap (Wood, 1980).

Operational Definitions

Attitude questionnaire: The instrument in Appendix A that is used to measure attitudes toward disability (Yuker, Block, & Campbell, 1962).

Attitude toward disability : One’s score on the attitude questionnaire (Yuker, et al., 1962; Appendix A).

Level of education: The semester in the occupational therapy curriculum (can be first or fourth semester undergraduate).

Occupational therapy student: A person who is enrolled in the occupational therapy curriculum at San Jose State University.

Significant difference: How confident the researcher is that the differences in scores on the attitude questionnaire did not occur by chance; this is established at the .05 alpha level.

Students who do not have disabilities: The occupational therapy students who do not report having a disability on letter B or C of the demographic section of the questionnaire (Appendix A).

Students with disabilities: The occupational therapy students who report to have a disability on letter B and C of the demographic section of the questionnaire (Appendix A).

Type of disability: The specific type of disability that the student with a disability reports to have under letter C in the demographic section of the questionnaire (Appendix A).

Significance of this Study

In the face of current health care trends in which the “business of health care” is driven by efficiency and profit, an awareness of students' attitudes toward disability will prove to be particularly useful (Peloquin, 1993, p. 939). These trends have contributed to an emphasis on making health care less responsive to the human needs of people with disabilities. This lack of response to human needs could be considered a negative perception of people with disabilities (Peloquin, 1993; Yerxa, 1980).

The results of this study suggested the effect that level of education within the occupational therapy curriculum at S.J.S.U. had on attitudes toward disability. Examining this effect is important, as it has been noted that having more positive attitudes toward disability promotes better rapport with clients and enables clinicians to care for clients more effectively (McDaniel, 1969; Schlaff, 1993). The results of this study may have revealed a need to directly address the attitudes toward disability within the educational curriculum at S.J.S.U.

This study also considered the differences in attitudes toward disability in students with disabilities compared to those without disabilities. How attitudes differ according to the type of disability that the student reported was another consideration in this study. Previous studies comparing the attitudes of people with and without disabilities or attitudes according to the type of disability were not found in the occupational therapy literature. Examining these different variables has enabled the author to see how various factors shape attitudes toward disability in occupational therapy students at S.J.S.U.

Assumptions

It was assumed that all students have answered the questionnaire as honestly as possible. It was assumed that holding positive attitudes towards disability is important in practice with clients and that the more realistically positive the attitude, the better potential outcome for the client's treatment.

CHAPTER 2

LITERATURE REVIEW

This chapter will review the literature related to attitudes toward disability. It will first describe a background on disability. Then the issue of attitudes toward disability among health care workers will be discussed. The concept of independent living will be described as a way of redefining the traditional rehabilitation model. Following a discussion of how values of the profession of occupational therapy compare to the concept of independent living, is a section on occupational therapy theory as it relates to attitudes toward disability. The literature review concludes with a discussion of studies that relate directly to occupational therapy and clinicians' and students' attitudes toward disability.

Background on Disability

Disability has been described as a "human constant" (Sheer & Groce, 1988, p. 23). In 1988, it was estimated that more than 32 million people in the United States were living with a disability (Godbey, 1989). With continued advances in health care, people will live progressively longer; more people will be surviving accidents and diseases than in the past. Therefore, this already significant minority of people will likely increase in the coming years (Pegles, 1988).

Disability has been present throughout history. It can be traced back through all human societies and since the dawn of civilization (Scheer & Groce, 1988). What has changed regarding disability is how various societies view

disability and, consequently, individuals' attitudes (Scheer & Groce, 1988). For example, the ancient Greek practice of infanticide of disabled infants demonstrates an intolerance for people with disabilities. However, in several small scale societies in the 18th and 19th centuries, people had much more positive attitudes toward disability. In these communities, face-to-face contact between individuals was frequent. Community members were more related and connected to each others lives. Therefore, a person's disability was one characteristic of the person and not his or her whole social identity. In more complex societies, where social contexts are more impersonal, a disability is commonly used to classify an individual (Scheer & Groce, 1988).

In recent decades, the United States has begun to grant people with disabilities increased public aid and legal protection in order to encourage independence (Scheer & Groce, 1988). Laws now exist that prohibit discrimination in education and employment and grant access to public programs for those with disabilities (Fine & Asch, 1988).

This formal support is, perhaps, the beginning of equality for citizens with disabilities. However, attitudes have yet to allow for complete acceptance of this population. There are still many "attitudinal handicaps" that plague the nation's population of people with disabilities. These negative attitudes permeate our culture. Though they may not always be acted out or voiced, they are subtly expressed in a variety of ways (Bender & Braveman, 1995). For example, according to Rousch (1986), negative references toward disability in our society are most obviously expressed in everyday language. As a physical therapist with a disability, Rousch (1986) explains that words such as "*crippled, lame,*

invalid, and *moron* " (p. 1552) have a negative tone and invoke feelings of dependency and inferiority in those they label. She suggests positive terminology as a basic, beginning step toward equality of people with disabilities.

Attitudes Toward Disability and Health Care Professionals

Many authors have found that even health care workers hold more negative attitudes toward the population of people with disabilities than is desirable or would be expected (Chubon, 1982; Peloquin, 1993; Volinn, 1983). There are many reasons for this. Volinn (1983) and Cocks (1989) have accused health professionals of being "labelers", identifying clients by their disabilities and not as human beings. Calling a client "the quad" or "the arthritic" even when the professional is not consciously trying to be harmful toward a client, can evoke negative feelings that strain the professional-client relationship. Volinn contends that labeling contributes to the professionals' "all-encompassing power relationship" (p. 387) with clients.

De Loach and Greer (1981) maintain that this power imbalance often leads to ineffective treatment in that the professional may carry a certain stereotype of disability that underestimates the clients' potential. Perhaps the consequences of health care workers negative attitudes are best expressed by this statement by a man who was ill with cancer (Harris & Stripling, 1980):

When am I going to be to control my life and be able to make my own decisions? I realize the doctors know what's best for me medically, but do they know what is best for me mentally as well? Doctors need to realize that I am not just a patient number, a tumor, or a disease, but that I am a human who needs a sense of security, a feeling of responsibility, a feeling of control over what is happening in my life and what I think should be done about it (p. 20).

Our society fosters the expectancy that health care professionals are somehow all-knowing (Peloquin, 1993). There is the expectancy that health care workers always know what is best for clients. These attitudes can lead to increased dependency on the decisions of health care workers and care-givers. This dependency diminishes the individual's control over his or her own life and, thus, hinders adjustment to disability (Schlaff, 1993). Clients often feel reticent to question professional opinions, express distress, or state their wishes regarding treatment. As a result, clients often feel powerless over their own recovery process and may learn to assume a dependent role as a person with a disability (Peloquin, 1993).

According to Peloquin (1993), health care professionals most often label clients as "difficult" or "noncompliant" (p. 834) when they are being challenged by clients who question them. Client challenges are often interpreted as personal attacks even though they are often only simple expressions of distress. If health care workers could identify more with the client role and generate more positive attitudes toward people with disabilities, they may be able to provide better care (Peloquin, 1993).

Health professionals tend to regard clients' diagnoses merely as clinical conditions, but to clients, these conditions effect every aspect of their lives (Peloquin, 1993). Professionals often fail to acknowledge the psychological adjustment that clients go through. Peloquin suggests there is an unspoken expectation for the client to smile and be happy. It has been suggested that practitioners may refuse to acknowledge the psychological pain associated with the disability to protect themselves from the pain clients are feeling.

Another way in which health professionals may be acting negatively toward people with disabilities could be a matter of misinterpretation and miscommunication between people with and without disabilities. Makas (1988) examined the attitudes toward disabilities of able-bodied people compared to the attitudes of people with disabilities. In her study, she had the able-bodied people fill out attitude questionnaires twice: once as honestly as possible and once under what she termed "fake well" (p. 54) conditions. "Fake well" was explained to the subjects as answering as they thought would best reflect the most positive attitudes towards disability. The people with disabilities also filled out the questionnaire but only under the "honest" condition.

The results were that the able-bodied people actually answered with better attitudes toward disability under the "honest" condition than under the condition that they believed was more positive. Makas explains that this is due to misunderstandings and miscommunications between people with and without disabilities rather than from actual negative intentions. Able-bodied people may be taking actions that they think are positive, but that people with disabilities interpret as negative. For example, people who did not have disabilities were more likely to suggest that people with disabilities be given special consideration because they are disabled.

Makas analyzed the data quantitatively to identify those circumstances under which the attitudes of the able-bodied people differed from the attitudes of people with disabilities. Makas found that the way in which the able-bodied people were scoring most negatively was on items which reflected an opportunity for them to be "nice, helpful, and ultimately place the disabled

person in a needy situation" (p. 58). One can see how this could occur especially with people such as occupational therapy students who, as a group, share a value of helping others (Danka, 1992). This could lead to an "overly helpful" attitude which was expressed in this study by several of the able-bodied people. This helpfulness can feel comfortable for the person with a disability at first, but eventually perpetuates the dependent role (Makas, 1988).

This study by Makas (1988) examined the attitudes of a small number of people in the general community, who were not necessarily in the health care profession. It would be important to examine the effect of misinterpretation of positive attitudes more specifically in health care professionals or pre-professionals, since contact with these people is where people with disabilities first develop either a helpful or a hindering attitude toward their own disability.

Concept of Independent Living

In the past decade or so, there has been a theoretical paradigm shift in the concept of rehabilitation. The "traditional" rehabilitation model has begun to be replaced by what Schlaff (1993) calls an "independent living" model (p. 944). Traditionally, the client is seen as the locus of the problem. The impairments of the client compromise the definition of the problem. In other words, the client is seen in terms of his or her impairment.

In contrast, the independent living model holds that the locus of the problem is not the client. Rather, the problem lies in the environment and in the medical model's narrow attitudes. The definition of the problem is also outside of the individual's physical limitations. The problem lies with dependence on

others, lack of support services, and architectural and economic barriers (Schlaff, 1993).

Solutions between models differ greatly as well. In the traditional rehabilitation model the solution lies outside of the individual. Solutions involve "intervention by the rehabilitation professional, evaluating and training, home and job site modification" (p. 65). The independent living model solves the problem through the individual, using his or her personal expertise and making him or her a part of treatment. The solutions listed include "peer counseling, advocacy, self-help, consumer control, and removal of community barriers and disincentives" (p. 65). The traditional rehabilitation model is cure oriented while the independent living model promotes the most fulfilling life possible (Schlaff, 1993).

Beatrice Wright (1980), a professor of psychology, describes a similar shift in thinking about disability, but in different words. She explains the phenomenon as defining the difference between the "coping versus the succumbing frameworks" (p. 275). The "succumbing framework" views disability as the dominant aspect of the individual's whole being. The person is no longer an individual with a personality; he or she "becomes" the disability. The significance is placed on what the individual cannot do and what the problems are instead of on how to adapt to get around the limitations. The "coping framework," which parallels the independent living model, represents a productive view of life with a disability. Individuals are seen as having abilities with intrinsic value. The difficulties encountered because of the disability are viewed as manageable and do not render the person helpless. The coping

framework also views the individual as able to seek out solutions to problems and discover a satisfying life. Disability is seen as one characteristic of a unique and complex individual.

Kirchman (1987), an occupational therapist, examines a similar concept of the meaning of disability within her discipline. She uses role theory to delineate the sick role versus the disabled role. Emphasis is placed on understanding the differences between these roles so that one can get in touch with thoughts and feelings about disability. Kirchman states that health professionals have had difficulty rehabilitating people due to the fact that they often relegate people with disabilities to the sick role and that this interferes with the adjustment process. It is her belief that an understanding of the differences between the sick role and the disabled role will lead to an appreciation of how attitudes of the professional can either facilitate or hinder the process of adjustment to disability in clients. With a better understanding of disability, the health care professional will be able to better facilitate the rehabilitation process as opposed to hindering it with negative attitudes. Kirchman's work, with an emphasis on positive regard for people with disabilities echoes some of the fundamental values of the occupational therapy profession which are discussed in further detail in the next section.

Values of the Occupational Therapy Profession

The independent living model is aligned with some of the fundamental values of occupational therapy. The profession grew out of positive attitudes toward those with mental disabilities in the age of moral treatment. The profession that would eventually become known as occupational therapy gave

the “insane” a chance to live in a humane environment with meaningful activity and balanced lives (Slagle, 1922). These pioneering occupational therapists finally gave people with disabilities a chance at reform, or at least a chance at enjoying life, instead of being locked up essentially as prisoners.

This humanitarian mission of the profession is apparent in more modern times as well. The 1980 American Occupational Therapy Association's (A.O.T.A.) National Conference was entitled “Caring is the Key.” The fact that A.O.T.A. chose caring as the theme for this convention in an age of important technological advancements in the health care field, suggests its place of importance to the leaders in the profession. Occupational therapists feel that they have a distinctive profession in that they view the individual holistically and emphasize abilities and strengths, instead of treating the pathology and giving up when the individual cannot be cured. If this is in fact the case, then an extremely positive attitude towards disability is implicit in the very nature of the profession (Benham, 1988). This positive regard for people with disabilities is apparent in occupational therapy theoretical framework as will be shown in the next section.

Theoretical Framework

According to Kiehlhofner (1985), human beings have an urge to explore and master their environments by engaging in chosen occupations and functioning in their environments. Oftentimes, incurring a disability interrupts this behavior and can lead an individual down a road to occupational dysfunction, in which stress and lack of environmental involvement prevail (Kiehlhofner, 1985). According to the Model of Human Occupation, it is the occupational

therapist's job to facilitate the individual's functioning in selected occupations. The occupational therapist acts as an enabler to assist the person with a disability to regain functioning and mastery of the environment. In order for the occupational therapist to assist the individual effectively, he or she must believe wholeheartedly in the individual's potential to thrive as an occupational being, no matter what disability the individual may have (Kiehlhofner, 1985). The occupational therapist must see the person with a disability as more than simply the disability itself. The occupational therapist must, essentially, have a positive attitude toward the individual with a disability, encouraging the individual to regain functioning despite the disability. A therapist's negative attitude toward the individual with a disability may hinder the individual's move toward occupational function in the adjustment process.

Attitudes Toward Disability and Occupational Therapy

There is a paucity of literature examining the attitudes toward disability of occupational therapists and students of occupational therapy. In addition, the conclusions of these research studies are contradictory and inconclusive. Some researchers (Benham, 1988; Elliot, Hanzlik, & Gliner, 1992), have found attitudes of students and clinicians to be very positive. Benham (1988) used the Scale of Attitudes Toward Disabled Persons (SADP) (Antonak, 1981) to measure the general attitudes of 619 occupational therapy personnel toward people with disabilities. Then she examined more specific attitudes, as applied to a case study of a child with Down's Syndrome.

Both the general attitude questionnaire and the specific case study revealed favorable attitudes. The only significant differences between variables

was in the number of years of practice. Practitioners with 11 or more years of experience had significantly more positive scores than those with 6 to 10 years of practice. Students and new practitioners with 5 or less years of experience also tended to have more positive attitudes. The researchers suggested that the more favorable attitudes from practitioners with 11 or more years of practice could be due to readjustment of attitudes or, perhaps, attrition. In addition, they suggest that those practitioners with 6-10 years experience may be disillusioned and less optimistic than practitioners with 5 or less years of experience (Benham, 1988).

In the specific case study portion, the occupational therapists with more experience showed less positive attitudes toward people with disabilities than did students. The researchers questioned the ability of the SADP to distinguish the difference between a positive attitude and one that is, perhaps, patronizing (Benham, 1988). In addition, the population used for this study consisted of attendees of the American Occupational Therapy Association (A.O.T.A.) annual conference. People who attend these conferences could be viewed as more likely to be positive and enthusiastic about their chosen career than those who do not attend. A more random sample is needed to draw conclusions about the attitudes of the profession as a whole.

Elliot et al. (1992) measured the attitudes of occupational therapy personnel, occupational therapists (OTRs) and certified occupational therapy assistants (COTAs), who did not have disabilities, towards peers with disabilities in a work situation. They used a familiarity with disability scale to measure the amount and type of contact subjects had with people with

disabilities. Elliot et al. (1992) examined the closest relationship the subject would feel comfortable having with a co-worker who had a specific type of mental or physical disability. They found occupational therapy personnel to have positive attitudes towards all disabilities, with the exceptions of drug dependency problems and psychiatric disorders. In addition, OTRs held more positive attitudes toward disability than COTAs on 14 of the 20 specific disability categories (e.g., cancer, asthma). This could be a reflection of educational level affecting attitudes toward disability. This study involved a mailed questionnaire to 500 A.O.T.A. members. The sample may have been biased, as occupational therapy personnel belonging to A.O.T.A. who also cared enough to actually fill out and return the questionnaire are most likely to be more positive about their jobs in general and, therefore, could hold more positive attitudes toward disability.

A study by Lyons (1991) revealed less positive attitudes of occupational therapy students. He compared the attitudes of occupational therapy students with those of business students enrolled in an Australian university. He used the Attitudes Towards Disabled Persons Scale (ATDP)-Form A (Yuker, Block, & Youngg, 1966) with freshman through senior students from these two majors. This commonly used questionnaire is structured so that positive attitudes reflect the extent to which the respondent perceives people with disabilities to have the same characteristics and require equal treatment as able bodied people.

The data revealed that the freshman students' attitudes did not significantly differ between the two disciplines. This result was surprising to Lyons. One would assume that the aspiring occupational therapist would hold

more positive attitudes toward those that they will devote their work to than would the business student who may have relatively little professional interest in people with disabilities. In addition, the attitudes of the sophomore, junior, and senior class occupational therapy students did not significantly differ from those of the incoming students. Hence, he concluded that neither the underlying values of those who chose occupational therapy as a profession nor the occupational therapy curriculum itself had a significant bearing on student attitudes toward disability. The results influenced Lyons (1991) to believe that more attention should be placed on who is treating people with disabilities and how these clients may be adversely effected by the negative attitudes.

A concurrent study by Lyons and Hayes (1993) used the same student population as Lyons (1991), but examined students' attitudes using a social distance scale. The social distance scale utilized nine successive degrees of social intimacy and asks the subject to choose how closely he or she could associate with people with 21 various disabilities. Again, the occupational therapy seniors did not demonstrate significantly different attitudes from the occupational therapy freshmen. However, the occupational therapy freshmen did express a desire to maintain less social distance from people with disabilities than did their business major peers. All subgroups of subjects expressed a hierarchy of preference for people with certain disabilities over others, with psychiatric disabilities, alcoholism, mental retardation, and cerebral palsy consistently ranking among the least acceptable conditions.

These results contradict one of the conclusions drawn by Westbrook and Adamson (1989) regarding the effect that the level of occupational therapy

education has on attitudes toward disability. These researchers studied the knowledge that Australian occupational therapy students had of people with disabilities as it related to their attitudes. Though they did not draw any conclusions about the overall positivity or negativity of the students' attitudes, they concluded that senior students held more positive attitudes towards disability than did the first through third year students. However, there was no relationship between the score on the ATDP scale (Yuker et al., 1966) and knowledge of people with disabilities. They found that occupational therapy students generally tended to lack knowledge of people with disabilities. The students expressed negatively biased perceptions of both difficulties and skills of people with disabilities. They also overestimated the amount of community assistance available for people with disabilities and were unfamiliar with the differences between males and females with disabilities. Westbrook and Adamson felt that this lack of knowledge may lead to ineffective treatment in the form of inappropriate goal setting and advice to clients.

Estes, Deyer, Hansen, and Russell (1990) found more positive results using the ATDP Scale-Form A (Yuker et al., 1966). These researchers examined the attitudes of first and fourth semester occupational therapy students. A comparison group, first and fourth semester medical technology students, were also tested. The results indicated that fourth semester occupational therapy students showed significantly higher scores than did the first semester occupational therapy students and the first and fourth semester medical technology students. There was no difference between the first and fourth semester medical technology students. The researchers concluded that

the occupational therapy curriculum positively influenced students' attitudes toward students with disabilities.

Several studies suggest that the effect of the rehabilitation professional's education and client-therapist contact may have a negative effect on attitudes toward disability (Chubon, 1982; Lyons, 1991; Wright, 1980; Yunker & Block 1979). According to Yunker and Block (1979), professionals in helper roles tend to regard clients whom they are helping as subordinates. It has been suggested that contact with people with disabilities does not necessarily facilitate the formation of positive attitudes (Donaldson, 1980; Lyons, 1991; Wolfensberger, 1983). Interaction is more likely to be effective if the person with the disability is of equal or higher status than the able-bodied person. When contact is not voluntary and enjoyable, it can evoke feelings of aversion and fear, which perpetuate negative attitudes. Lyons (1991) found that contact that significantly changed attitudes encompassed a valued social role of the person with the disability. He further stated that contact usually experienced by occupational therapy students is in clinical settings which may generally focus on the clients' problems and disabilities instead of their strengths and abilities. He also said that some form of pleasurable contact with people with disabilities should be part of the educational curriculum in occupational therapy. Both Chubon (1982) and Lyons (1991) maintain that there is a need to consider ameliorative measures to improve attitudes of students in rehabilitation professions. This requires awareness of students' attitudes and factors that contribute to the quality of these attitudes before measures can be taken (Lyons, 1991).

In summary, this chapter reviewed the literature dealing with attitudes

toward disability. It began with a discussion on the background of disability in which disability was described as present throughout history. Attitudes about disability are what have changed in different societies and time periods.

Attitudes of health care professionals were discussed next. The work of several researchers suggested that health care professionals may actually be hindering their client's recovery by their negative attitudes toward disability. The concept of independent living was suggested to redefine the traditional rehabilitation model. How the fundamental values of the occupational therapy profession are well aligned with a positive regard for people with disabilities was discussed. The Model of Human Occupation was introduced as a theoretical framework to support the importance of positive attitudes toward disability in occupational therapy. Lastly, research on attitudes towards disability as it relates to occupational therapy was discussed. Results of previous studies on this subject of attitudes toward disability in students and practitioners in occupational therapy are contradictory and inconclusive.

CHAPTER 3

DESIGN AND METHODOLOGY

In chapter three, the null hypotheses are restated followed by a description of the subjects and sample selection process. Next, the design of the study was described in detail including the adaptation or modifications that were made during this study. Following a discussion of the data analysis, techniques of the testing procedures are outlined.

Null Hypotheses

The following null hypotheses were tested:

1. There will not be a difference in scores on an attitude questionnaire between occupational therapy students at S.J.S.U. and a sample of business administration undergraduates from a similar study (Oberle, 1975).
2. There will not be a significant difference in scores on the attitude questionnaire among students in their first semester and fourth semester of occupational therapy classes.
3. There will not be a significant difference in scores on the attitude questionnaire between students with disabilities and those without disabilities.
4. There will not be a difference in scores on an attitude questionnaire between students with disabilities according to the type of disability that they have.

Subjects

Subjects consisted of undergraduate occupational therapy students at San Jose State University, both males and females, of various ages. Students in first and fourth semester classes were asked to fill out the questionnaire. All students in the chosen classes were included in the survey. The sample of students with disabilities was determined through asking demographic information on the questionnaire. For example, students were asked, "Do you consider yourself to have any type of disability? If so, what type of disability?". Level of education was determined in the same manner (see Appendix A).

Design

The study was quantitative in nature and used survey methodology. Variables, such as the student's educational level in the curriculum, whether or not the student had a disability, and type of disability, were determined by student report.

Instrument

The instrument, Attitude Toward Disabled Persons Scale (ATDP) Form-B (Yuker et al., 1962) (see Appendix A), was developed in 1962 and has been used extensively in research. Studies have established data on the validity and reliability of the instrument (Yuker et al., 1966; Yuker & Block, 1986). The stability coefficients obtained for test-retest reliability for form B are .71 and .83. Equivalence reliability as determined by the split-half method yields reliability coefficients ranging from .72 to .87 (Yuker et al., 1966). The questionnaire contains 30 questions and is scored using a likert-type of scale with scores ranging from -3 to +3. The scores correspond to how much the subject

disagrees (-) or agrees (+) with each question. No zeros may be used as answers. The questionnaire is totaled by reversing the sign of the value given for all of the negatively worded questions (numbers: 1, 3, 4, 6, 7, 10, 12, 13, 22, 26, 28), adding up the total score, and changing the sign of the total. A constant of 90 is then added. The questionnaire scores can range from 0-180; the higher the score the better the attitude toward disability (Yuker et al., 1966).

Some of the language on the original questionnaire was adapted by the researcher. For example, "disabled persons" was changed to "people with disabilities" and "people who are disabled" was changed to "people who have disabilities." In addition, after data from the first semester class had been collected, the researcher was given feedback to change "mental illness" to "psychiatric disabilities" in the demographic section of the questionnaire. This change was made before data was collected for the fourth semester class.

Measures

Data relevant to the first null hypothesis regarding the difference in attitudes between occupational therapy students and business students will be examined using descriptive statistics. A formal statistical analysis was not done due to the lack of information for the study of business students from Oberle (1975).

The second two null hypotheses were analyzed using an analysis of variance. The alpha level was .05 for these statistical analyses. The Statistical Package for the Social Sciences (S.P.S.S.) was used to analyze the data.

Descriptive statistics were utilized to test the fourth null hypothesis regarding the attitudes toward disability according to type of disability.

Computational techniques could not be used due to the small number of students within each disability category.

Procedure

Two instructors were contacted regarding permission to use their classes to collect data. Morag Patterson taught a first semester introductory course on occupational therapy as a profession. This was an ideal class to include because the students were beginning to become aware of their attitudes toward disability to be used in their future careers as occupational therapists. Ruth McFadden taught a fourth semester class in the occupational therapy curriculum on management and occupational therapy. This class was used to survey occupational therapy students in their last semester of professional training. By the end of the fall semester, results of the study will be available to share with the classes.

Once permission was granted, the researcher distributed the questionnaire in the first semester class on September 5, during the first week of classes. Data from the fourth semester class was collected on September 12. This was assumed to be an ideal time in the semester to collect the data since it did not interfere with mid term or final exams in any way.

The researcher passed out the questionnaire (see Appendix A) and the attached cover sheet (see Appendix B) to the students and told them "What is being passed out to you is a questionnaire that measures attitudes toward disability. Please read all of the questions carefully and answer each one as honestly as you can. It is important that you answer all of the questions. Do not leave any blanks and do not answer with a zero. There are no right or wrong

answers and this is not timed, but it should take you approximately 15-20 minutes to complete. Do not put your name on the questionnaire; this is meant to be completely anonymous. If you have any questions about the research you are participating in, feel free to contact any of the individuals on the attached cover sheet. Thank you very much for your participation in the study."

CHAPTER 4

DATA AND RESULTS

Chapter four discusses the data that were gathered for this study and the results that were indicated. It will begin with demographic information on the subjects which will be followed by a description of the results of each null hypothesis. Tables presenting the data are also included in this section.

Demographics

A questionnaire adapted from the Attitudes Toward Disabled Persons Scale-Form B (Yuker et al., 1966) (see Appendix A) was passed out to first and fourth semester occupational therapy students. Only those questionnaires which were 90% or more complete could be used. In addition, those questionnaires that had any missing information in the demographic section (letters A through C on the questionnaire) could not be used. Of the 109 questionnaires collected in the classes, 103 could be used.

Of the total questionnaires completed for this study, there were 62 (60.2%) from the first semester class and 41 (39.8%) from the fourth semester class. Of the 103 subjects, 86 (83.5%) reported to have no disability, while 17 (16.5%) reported to have some type of disability. Those with a disability were further broken down to six (5.8%) that reported to have physical disabilities, two (1.9%) that reported to have psychiatric disabilities, and nine (8.7%) that reported to have learning disabilities. Specific physical disabilities that students reported included: severe scoliosis, visual deficits, multiple sclerosis, an

ileostomy, and asthma. The two subjects who stated they had psychiatric disabilities both reported depression. The nine subjects who reported having learning disabilities generally did not specify a specific type.

Although some subjects with disabilities identified more specific disabilities within the data, larger categories of physical, psychological, and learning disabilities were the sub-groupings used to classify the subjects with disabilities. The subjects who reported having a disability were first considered as a whole when their attitude scores were compared to the scores of the subjects reporting no disability. Then the subjects with disabilities were divided into the three sub-groups when their attitude scores were compared with each other and with the scores of subjects that reported no disability.

Out of the 103 questionnaires, there were 29 (28.1%) male subjects and 74 (71.8%) female subjects. No computational statistical analysis was done to examine the differences in attitude scores of males and females in this study. However, the differences indicated by descriptive statistics are worth reporting.

The 74 female subjects had a range in attitude scores from 82 to 169. The mean or average value of the female subjects was 122.65, with a standard deviation of 18.96. The two highest attitude scores in this study, 165 and 169, were scored by female subjects. The higher the attitude score, the more positive the subject's attitude toward disability according to this questionnaire (Yuker et al., 1966).

The 29 male subjects' attitude scores ranged between 64 and 161. The mean attitude score for the male subjects was 112.34, with a standard deviation of 22.89. The male subjects scored the three lowest attitude scores in this study:

64, 65, and 74. A low attitude score indicates a less positive attitude toward disability according to this questionnaire (Yuker et al., 1966).

Results of Null Hypotheses Tests

1) There will not be a difference in scores on an attitude questionnaire relating to disability between occupational therapy students at S.J.S.U. and a sample of business administration undergraduates from a similar study (Oberle, 1975).

The attitude scores ranged from 64 to 169 for the occupational therapy student population. As presented in Table 1, the mean score of the entire occupational therapy student sample was 119.75.

Information on a study using the ATDP-Form B for a sample of business administration students (Oberle, 1975) was obtained for comparison to the occupational therapy students. As shown in Table 1, the mean score for this group of business students was 119.20. The sample consisted of 120 students (Oberle, 1975). The study by Oberle provided the researcher with a sample of students assumed to be similar in age and educational level to the students in the present study.

Due to the fact that a measure of standard deviation was unavailable for the study by Oberle (1975), the use of a statistical test was not possible. However, there appears to be no appreciable difference between the mean attitude scores for the sample of occupational therapy students in the present study and the business students in the study by Oberle (1975) (refer to Table 1). The mean attitude score of the sample of occupational therapy students was only .55 higher than the mean attitude score for the sample of business students.

Table 1

Mean Attitude Scores of Occupational Therapy Students and Business Students

Group	<u>n</u>	<u>M</u>	<u>SD</u>
O.T. Students	103	119.75	20.56
Business Students	120	119.20	-

Note: O. T. = Occupational Therapy.

Note: Data on business students obtained from Oberle (1975); Measure of standard deviation was not available.

2) There will not be a significant difference in scores on the attitude questionnaire among students in their first semester and fourth semester.

The range of attitude scores for first semester students was from 64 to 169, which are also the two most extreme values for the student population as a whole. As shown in Table 2, the mean score was 119.03, with a standard error of 2.66. The standard deviation was 20.92.

The range of attitude scores for the fourth semester was from 82 to 165. As shown in Table 2, the mean attitude score was 120.70, with a standard error of 3.23. The standard deviation was 20.45.

A two-tailed test was conducted to determine whether or not there was a significant difference between the mean attitude score of students in first and fourth semester classes. The alpha value was set at .05. The result of the t -test was not significant at the .05 alpha level, with a resulting t -value of .40. Therefore, the null hypothesis can be accepted because there appears to be no statistically significant difference between the means of the first and fourth semester students.

3) There will not be a significant difference in scores on an attitude questionnaire between students with disabilities and those without disabilities.

The range of attitude scores for those 86 students without disabilities was from 64 to 169, which were also the two most extreme values for the student population as a whole. As shown in Table 3, the mean score was 119.35, with a standard error of 2.24. The standard deviation was 20.73.

The range of attitude scores for those 17 students who reported to have a disability was from 82 to 161. As shown in Table 3, the mean score was 121.76,

Table 2

Mean Attitude Scores of First and Fourth Semester Occupational Therapy Students

Group	<u>n</u>	<u>M</u>	<u>SD</u>
1st Semester O.T. Students	62	119.03	20.92
4th Semester O.T. Students	41	120.70	20.45

Note: O. T. = Occupational Therapy.

Table 3

Mean Attitude Scores of O. T. Students With and Without Disabilities

Group	<u>n</u>	<u>M</u>	<u>SD</u>
Students With Disabilities	17	121.76	20.17
Students Without Disabilities	86	119.35	20.73

Note: O. T. = Occupational Therapy.

with a standard error of 4.89. The standard deviation was 20.17.

A two-tailed test was conducted to determine whether or not there was a significant difference between the mean attitude score of those students with disabilities and those without disabilities. The alpha value was set at .05. The result of the t -test was not significant at the .05 level, with a resulting t -value of .44. Therefore, the null hypothesis was accepted because there appears to be no statistically significant difference between the mean of students with disabilities and those without disabilities.

4) There will not be a difference in scores on an attitude questionnaire between students with disabilities in regard to the various types of disabilities (physical, psychiatric, and learning disabilities).

The students with disabilities were grouped according to the general type of disability they reported. The questionnaire suggested four general types under letter B in the demographic section of the questionnaire: physical disability, learning disability, developmental disability, and psychiatric disability (see Appendix A). As would be expected, the three general types of disabilities that students reported to have were: physical disabilities, psychiatric disabilities, and learning disabilities. Specific types of disabilities were stated in some cases, however, students' questionnaires were only divided into general types of disabilities due to already small sample sizes. Although the mean attitude scores appear to differ considerably between students with different types of disabilities, a formal analysis of variance was not done due to the small sample sizes of the three disability subgroups. The data were instead evaluated using descriptive statistics.

The range of scores for the six students with physical disabilities was from 121 to 143, with a mean value of 132.17. The standard deviation for students with physical disabilities was 7.81. The range of scores for the two students with psychiatric disabilities was 82 to 103, with a mean value of 92.50. The standard deviation for the students with psychiatric disabilities was 14.85. The range of scores for the nine students with learning disabilities was from 98 to 161, with a mean value of 121.33. The standard deviation of students with learning disabilities was 21.28. Due to the small sample sizes, use of statistical tests was inappropriate; however, there appears to be an appreciable difference in mean attitude scores between the three sub-groups of students with disabilities. Refer to Table 4 for a comparison of attitude scores for students with different disabilities.

Table 4

Mean Attitude Scores of O. T. Students With Different Disabilities

Group	<u>n</u>	<u>M</u>	<u>SD</u>
Physical Disabilities	6	132.17	7.81
Psychiatric Disabilities	2	92.50	14.85
Learning Disabilities	9	121.33	21.28
All Students with Disabilities	17	121.76	20.17
Students Without Disabilities	86	119.35	20.76
All O.T. Students	103	119.75	20.56

Note: O. T. = Occupational Therapy.

CHAPTER 5

Discussion and Recommendations

Chapter five presents a discussion and implications that are a result of the data analysis. This chapter concludes with suggestions for future research, limitations, and conclusions. Also included are some recommendations for occupational therapy educational curricula.

Although the occupational therapy students did not score with significantly different attitudes toward disability than their business student counterparts, their scores generally did not represent negative attitudes. Conine (1969) used a mean score of 100 or higher on the ATDP scale (Yuker et al., 1966) to separate those with positive attitudes from those with unfavorable attitudes toward people with disabilities. This scoring criteria was established in 1969, when there was less awareness of disability (Scheer & Groce, 1988), however, it remains something to consider. Overall, 86.4% of the occupational therapy students scored over 100 on the ATDP in this study, indicating positive attitudes toward disability according to Conine (1969).

Although no computational statistical tests were used to examine the differences between male and female attitude scores, an appreciable difference exists with females generally scoring with more positive attitudes. This difference has been noted in several previous studies (Lyons & Hayes, 1993; Mitchell, Hayes, Gordon, & Wallis, 1984; Yuker, Block, & Young, 1970). Yuker and Block (1986) listed separate norms for females and males due to the large

number of studies they reported that found females scoring significantly higher than males (44%). Males scored higher than females in only 5% of the studies, while the other 51% of the studies showed no statistically significant difference between the sexes. Since people who chose occupational therapy as a profession are predominantly female (Lyons & Hayes, 1993) and females have been shown to generally have more positive attitudes toward disability than males (Yuker & Block, 1986), gender disproportions could represent a confounding variable in studies such as the current study. In Lyons and Hayes study, the population of occupational therapy students was only eight percent male. Therefore, they were forced to exclude males from their sample when comparing occupational therapy students to the business students, which were 52% male. The present study's population was 28% male. This proportion of male students was thought to be large enough that males were included in the comparison with the population of business major undergraduates.

There was no difference in attitude scores of occupational therapy students and those of business administration students from the study done by Oberle (1975). This outcome conflicts with results from a study by Estes et al. (1990). These researchers found a significant difference in scores between occupational therapy undergraduate students and medical technology students using the ATDP-Form A (Yuker et al., 1966). Similarly, Benham (1988) found positive attitudes in occupational therapy personnel toward people with disabilities.

The result of the present study actually parallels the result of Lyons (1991). This study measured attitudes of occupational therapy students and

compared them with attitudes of business students to find no significant difference between the scores of the two groups.

The finding that the attitudes of occupational therapy students are no more positive than their business oriented peers is of concern. Lyons (1991) was so concerned with the attitudes of incoming occupational therapy students that he suggested the possibility of not accepting students into the profession who do not hold positive attitudes toward people with disabilities. One would think that a profession built upon a highly positive regard for people with disabilities would both attract people with very positive attitudes and engender more positive attitudes through the education of its future professionals (Lyons, 1991).

The occupational therapy students also generally have more exposure to people with disabilities than do business undergraduates due to the entrance requirement of volunteer hours in a clinical setting. One would think that this contact would contribute to more positive attitudes. In addition, the study examining business students' attitudes toward disability by Oberle was published in 1975, a time when the general population was only beginning to become more aware of the rights of people with disabilities. One would think that attitudes toward disability, in general, to be less favorable in the early 1970s than in the present since there was less awareness of disability. It is only in the last 20 years that people with disabilities have become more visible have been granted significant legal rights and public support in the American community (Scheer & Gross, 1988).

Part of the problem may lie in the result of a study done by Cooperstein

(1991). She reports recent changes in the reasons people are drawn to the profession of occupational therapy, with more emphasis given to availability of jobs and the expectation of earning a good salary. This finding gives the profession of occupational therapy even more reason to be concerned with the effectiveness of educational curricula in fostering more favorable attitudes toward disability.

The present study failed to find a significant difference between first and fourth semester occupational therapy students' attitude scores (refer to Table 2). This result conflicts with studies that have found a positive change in attitude as students progress through the occupational therapy curriculum (Estes et al., 1991; Westbrook & Adamson, 1989). However, the present finding is consistent with the previous findings of Lyons (1991) using the ATDP-A and Lyons and Hayes (1993) using a social distance scale. Both of these studies showed no statistically significant difference between occupational therapy students in their first year versus those students in their fourth year.

It would appear that years of undergraduate education in occupational therapy have no appreciable effect on students' attitudes, perceptions, and feelings toward persons with disabilities and this may be seen as disconcerting (Lyons, 1991; Lyons & Hayes, 1993). Perhaps the students come away from their education with the knowledge and skills to work with people with disabilities but have generally not developed more favorable beliefs and feelings toward people with disabilities (Lyons & Hayes, 1993).

Yerxa (1983) expressed certain values that she believes represent the foundation of occupational therapy. These values include: 1) a deep sense of

every person's assets and abilities despite the presence of disability and 2) a belief that all human beings have the potential to succeed in occupational performance, whether or not they are labeled as disabled and/or are not responding to medical interventions.

It is logical to assume that these two beliefs represent favorable attitudes toward people with disabilities. The questions remain: are occupational therapy educational programs attending well enough to students' attitudes and beliefs about people with disabilities? Are the educational programs effectively teaching the fundamental convictions of the profession so that they can be applied in practice?

DePoy and Merrill (1988) found that occupational therapy students were able to articulate these values described by Yerxa by the time they had progressed through their education. However, they were not taught how these values were to be exercised in working with people with disabilities nor did they find these values relevant to practice as occupational therapists.

Sabari (1985) suggests that the content of occupational therapy educational curricula needs to more carefully address the attitudes and values of future professionals. If the educational curricula is not ensuring a shift toward a more positive attitude as students progress through course work, the profession of occupational therapy may not be effectively promoting its fundamental values described by Yerxa (1983).

One way in which many educational curricula in occupational therapy may be failing to promote the most positive attitudes is that the majority of student contact with people with disabilities is through a service-provider role

(Lyons, 1991). Although contact with people with disabilities has been shown to have a powerful effect on attitudes, not just any contact will bring about a positive change. It has been shown that unguided contact with people with disabilities could even engender negative attitudes (Gething, 1982). Rousch (1986) suggests that client-caregiver contact may not be conducive to the development of positive attitudes toward people with disabilities, if that is the only type of contact experienced. Contact within the clinical setting is likely to focus on an individual's disabilities, which could evoke aversion and fear and reinforce negative stereotypes (Lyons & Hayes, 1993). Attitudes have been measured as less favorable when an individual's inadequateness and differentness related to his or her disability are emphasized (Wright, 1980). Lyons (1991) concluded that those students who had contact with people with disabilities in the context of valued social roles (e.g. co-worker) had significantly more positive attitudes than did students who only had contact in a client-therapist situation or no contact whatsoever. This idea of valued social role status contact is reinforced by the work of Donaldson (1980) and Wolfensberger (1983). Thus, Lyons (1991) suggested that contact outside the clinical setting, which is both enjoyable and between two people of equal status, as an important part of the occupational therapy curriculum. Lyons further suggested the need to incorporate the views of people with disabilities on what they have experienced living with a disability and their reactions to professional intervention into the curriculum. He emphasized the importance of adding this "insider's view" (p. 315) to learning medical diagnoses and treatment procedures.

Westbrook and Adamson (1989) also demonstrated the need for the “affective” component as well as the cognitive component of learning about disability (p.120). In their study, senior occupational therapy students were more knowledgeable than freshmen students about people with disabilities. However, there was no correlation between more knowledge of disability and higher attitude scores.

Kirchman (1987), using an affective approach, demonstrated a significant difference in attitude scores in two successive junior occupational therapy classes. She measured the students’ attitudes using an ATDP scale (Yuker et al., 1966) at the beginning of the year and then implemented a course as part of a direct intervention to improve attitudes toward disability. This course involved modules and discussions of people with disabilities and readings which described personal accounts of negative attitudes people with disabilities have encountered. It also involved independent readings that carried social messages about attitudes toward elderly people and people with disabilities. She incorporated a lecture on the hospice movement and an assignment on death and dying that allowed for discussion on these topics. At the end of the year, she measured attitudes again, with significantly more positive results with two successive junior classes.

The present study did not detect a significant difference in attitude scores in students with disabilities and those without disabilities. Although the mean value for students with disabilities, as a whole, was slightly higher than the mean value for the students without disabilities, the difference was not significant (refer to Table 3). The difference in attitude scores between people

with and without disabilities is a factor that has not previously been examined with this type of population.

There has been extensive research dealing with the measurement of attitudes toward disability in people who do not have disabilities, yet relatively little dealing with attitudes of people with disabilities (Yuker & Block, 1986). Although the ATDP scale was specifically designed to measure attitudes in both people with and without disabilities, there has not been research examining people with disabilities in recent years (Yuker & Block, 1986). However, in the early 1960's, several studies demonstrated a difference in scores of people with and without disabilities. The collective findings of several studies used to establish norms for the ATDP scale demonstrate a significant difference in attitudes between people with and without disabilities (Yuker et al., 1966). The scores were so consistently different that separate norms were established for people with disabilities, as they were for males and females (Yuker et al., 1966).

What is more prevalent in recent years is literature dealing with stereotypes of people with disabilities and how people who do not have disabilities perceive disability differently than do people with disabilities (Kelly, Sedlacek, & Scales, 1994; Makas, 1988). These studies demonstrate differences in attitude toward disability indirectly. Makas (1988) confirmed that people with and without disabilities actually differ on what they believe constitutes a positive attitude toward disability. Makas asked people who did not have disabilities to fill out a questionnaire in such a way as to convey the most positive attitudes toward people with disabilities. This resulted in even larger differences in attitudes between people with and without disabilities than when

subjects were answering honestly. People who did not have disabilities actually demonstrated less favorable attitudes toward disability when they thought they were answering more positively.

The study by Kelly et al. (1994) also revealed differences in the ways people with disabilities and those without disabilities viewed and each other. Data revealed stereotyped and often incorrect perceptions as each group rated the people in the other group. People with disabilities rated people without disabilities as more extroverted and emotionally stable whereas people with disabilities were rated as more conscientious and cultured. There were no differences between the groups, however, when each subject rated him- or herself.

Despite the differences in perceptions between people with and without disabilities seen in the literature, the present study did not demonstrate a significant difference in attitudes toward disability between these two groups (refer to Table 3). However, the results do indicate a notable difference in attitude scores when the group of students with disabilities was divided into three subgroups according to type of disability (physical, psychiatric, and learning disabilities).

Although there has been research dealing with differences in attitude scores according to type and extent of disability, the research deals with differences only within the realm of physical disabilities and was done in the early 1960's (Yuker & Block, 1986). Several of these studies, reported by Yuker, Block, and Campbell (1960), examined the differences in attitude scores of people with cardiovascular versus pulmonary versus arthritic disabilities,

between neurological versus non-neurological disabilities, between sensory versus non-sensory disabilities, and between upper-body versus lower body disabilities. The results of 43 similar comparisons were tabulated and 90% of these studies showed no significant differences in attitudes toward disability among people with different physical disabilities (Yuker & Block, 1986). There has been no previous research found dealing with attitude scores of people with learning disabilities and/or psychiatric disabilities.

Due to the small sample sizes and, therefore, lack of statistical computations to establish significance, it was impossible to establish a correlation between types of disability and attitude scores. However, it is interesting to note that the people with more noticeable physical differences, such as severe visual deficits, multiple sclerosis, scoliosis, and an ileostomy tended to have higher attitude scores (refer to Table 4) than did people with less physically noticeable disabilities. All questionnaires of subjects who reported having a physical disability scored above the mean score for all occupational therapy students (refer to table 4). The lowest attitude score (121) in the physical disabilities subgroup was one that specified asthma as a disability. It was noted that asthma is a physical disability that is not necessarily visibly apparent.

The mean score for students with physical disabilities was 12.82 points above the mean for students with no disability (refer to Table 4). It is possible that people with a visible, physical disability are forced to deal with the disability and adjust to it over time. They are often subjected to others' negative attitudes and devaluation by society (Lyons, 1991) because their disability can be

detected from differences in appearance. Perhaps this obstacle causes people with physical disabilities to be more sensitive in their own attitudes toward disability.

This effect can be thought of as similar to the effect of people who do not have disabilities who have had equal status contact with people with disabilities (Lyons, 1991). Contact allows the person to become familiar with the disability, to become more comfortable with differences, and to realize that people with disabilities are people first instead of regarding them as if they are their disabilities.

The mean attitude score of students who reported learning disabilities was fairly close to the mean for all occupational therapy students (refer to table 4). There was, however, a wide standard deviation among these scores. This wide range demonstrated varying attitudes among students with learning disabilities. Six of these nine students scored below the mean for all of the occupational therapy students and three scored well above this mean. It is possible that the wide range in scores is due to the effect of severity of the learning disability with the speculation that the more severe and thus "visible" the learning disability, the more positive the attitude toward disability.

Although the sample of students with psychiatric disabilities was small (refer to table 4), the low scores of these students are worth noting. Considering the score of 100 or higher reflecting positive attitudes toward disability as suggested by Conine (1969), the students with psychiatric disabilities scored with unfavorable attitudes. The students with psychiatric disabilities were the only group with a mean score of under 100.

The review of the literature did not find previous research on the attitudes of people with psychiatric disabilities toward disability in general. There has, however, been research on attitudes of people who do not have disabilities toward specific subgroups of disability (Elliot et al., 1992; Lyons & Hayes, 1993). Elliot et al. (1992) examined attitudes of occupational therapy personnel. Results indicated positive attitudes toward peers with disabilities in a work situation, with the exception of peers diagnosed with drug dependency or psychiatric disabilities.

Lyons and Hayes (1993) examined the attitudes of occupational therapy students toward different disabilities. The authors discovered a hierarchy of preference for people with disabilities, with psychiatric disabilities consistently ranking among the least favored. Lyons and Hayes (1993) are particularly concerned with these negative attitudes of occupational therapy students toward people with psychiatric disabilities.

The ATDP purports to be a valid measure of the extent to which people with disabilities accept their disabilities and/or accept themselves (Ylker & Block, 1986). Perhaps the low scores of people with psychiatric disabilities in the present study demonstrate a non-acceptance of their own disability, just as people who do not have disabilities demonstrate negative attitudes toward psychiatric disabilities.

The possibility of a link between psychiatric disabilities and non-acceptance is aligned with the results of a large-scale investigation of 1,754 psychiatric patients using a measure of self-concept (Fitts, 1972 a). He concluded that the subjects "tended to have low self-esteem" (p. 97). In a

subsequent article, Fitts (1972 b) stated that after a review of data from people with various physically disabling conditions, that "physical disabilities are seemingly less related to the self-concept than psychiatric disabilities" (p. 32-33).

Suggestions for Future Research

The results of this study do not show a correlation between specific types of disability and attitude score. These data should only be considered pilot data and could be researched further in future studies. Another topic for future research is how the type of contact (unequal versus equal status) a person has with people with disabilities varies with attitude toward disability. The effect of having classmates or friends with disabilities on an individual's attitude toward disability could yield practical results for occupational therapy educational programs. A study on how attitudes vary toward people with different types of disabilities could reveal interesting results. Attitudes could be measured by a social distance scale (as described in chapter two) and would yield more specific results toward different disabilities. A follow up study could be done measuring the attitudes toward disability in the sample of first semester occupational therapy students when they are in their fourth semester during the spring of 1997.

Limitations

One limitation of this thesis was that it involved a self report technique. Students may have answered in what they considered a more socially desirable manner rather than how they actually felt. In addition, the population was one of convenience and may not be representative of all occupational

therapy students, only those at San Jose State presently in their first and fourth semester. Therefore, the results cannot be generalized to other similar populations. The sample size was limited, especially the sub-groups of students with different disabilities. More conclusive results could have been drawn with larger samples. Another limitation is it has been suggested that the ATDP scale is not sensitive enough and measures attitudes toward disability too generally (Lyons & Hayes, 1993). Lyons and Hayes suggest that one can get a more accurate picture of attitudes toward disability when using more specific measures, such as a social distance scale. In addition, the cross-sectional design of this study limits the strength of the findings. With this type of design there is less control over confounding variables since two different sets of people are compared. A longitudinal design measuring one group of students at the beginning and again at the end of the program would have allowed for more conclusive findings.

Conclusions

The results of this study suggest that attitudes toward disability in occupational therapy students at San Jose State University are not significantly different than those of business administration undergraduates (Oberle, 1975). In addition, the attitudes of first and fourth semester occupational therapy students were not significantly different from each other suggesting that the occupational therapy curriculum had no influence on the students' attitudes toward people with disabilities. These two results are cause to consider adapting the educational curriculum in occupational therapy to more effectively address positive attitude development in future occupational therapists.

The attitudes of students who reported to have a disability did not seem to differ from students who did not have disabilities. However, it was noted that the students with visible physical disabilities did have considerably more positive attitudes than students with other disabilities. Students with psychiatric disabilities had remarkably low attitude scores. These pilot data present interesting possibilities for future research.

Occupational therapists feel that they have a distinctive profession in that they view the individual holistically and emphasize abilities and strengths, instead of treating the pathology and giving up when the individual cannot be cured (Yerxa, 1980). If this is in fact the case, then an extremely positive attitude towards disability is implicit in the very nature of the profession (Benham, 1988). Occupational therapists have a responsibility to carefully examine their attitudes toward disability to ensure optimal care for their clients.

REFERENCES

- Allport, G. W. (1935). Attitudes. In C. Murchison, (Ed.), Handbook of Social Psychology (p. 789-884). Worcester, MA: Clark University Press.
- Antonak, R. F. (1981). Development and psychometric analysis of the Scale of Attitudes Toward Disabled Persons (Technical Report No. 1). Durham, NH: University of New Hampshire, Education Department.
- Arkansas Research and Training Center in Vocational Rehabilitation. (1990). Vocational rehabilitation services in independent living centers. Hot Springs, AR.
- Bender, L. & Braveman, D. (1995). Power, Privilege, and Law: A Civil Rights Reader. St. Paul, MN: West Publishing Co.
- Benham, P. K. (1988). Attitudes of occupational therapy personnel towards persons with disabilities. The American Journal of Occupational Therapy, 42, 305-311.
- Ben-Sira, Z. (1986). Disability, stress, and readjustment: The function of the professionals' latent goals and affective behavior in rehabilitation. Social Science and Medicine, 23, 43-55.
- Bowe, F. (1980). Rehabilitating America. New York: Harper and Row.
- Cangeloski, V. E., Taylor, P. H., & Rice, P. F. (1983). Basic statistics: A real world approach. St. Paul, MN: West Publishing.
- Chubon, R. A. (1982). An analysis of research dealing with the attitudes of professionals toward disability. Journal of Rehabilitation, 48-49, 25-30.
- Cocks, E. (1989). An Introduction to intellectual disability in Australia. Canberra, Australia: Australian Institute on Intellectual Disability.
- Conine, T. A. (1969). Acceptance or rejection of disabled persons by teachers. The Journal of School Health, 39, 278-281.
- Cooperstein, K. R. (1991). A survey of the reasons why new therapists chose occupational therapy as a profession: Implications for recruitment. Unpublished master's thesis, San Jose State University.

Danka, M. A. (1992). Differences in values and goals of occupational therapy students. American Journal of Occupational Therapy, 47, 453-459.

De Loach, C. & Greer, B.G. (1981). Adjustment to severe physical disability. New York: McGraw Hill.

Donaldson, J. (1980). Changing attitudes towards handicapped persons: A review and analysis of research. Exceptional Children, 46, 259-274.

Estes, J. P., Deyer, C. E., Hansen, R. A., Russell, J. C. (1991). Influence of occupational therapy curricula on students' attitude toward persons with disabilities. American Journal of Occupational Therapy, 45, 156-159.

Evans, J. H. (1976). Changing attitudes toward disabled persons: An experimental study. Rehabilitation Counseling Bulletin, 19, 572-579.

Feinberg, L. B. (1971a). Intolerance of ambiguity as a variable in attitudes toward the disabled. Psychological Aspects of Disability, 18, 117-121.

Fine, M. & Asch, A. (1988). Disability beyond stigma: Social interaction, discrimination, and activism. Journal of Social Issues, 44, 3-21.

Fitts, W. H. (Speaker). (1972 a). The self concept and psychopathology. Monograph No. 4. Nashville, TN: Counselor Recordings and Tests.

Fitts, W. H. (Speaker). (1972 b). The self concept and behavior: Overview and supplement. Monograph No. 7. Nashville, TN: Counselor Recordings and Tests.

Gething, L. (1982). A preliminary report on the Cumberland Disability Program. Australian Rehabilitation Review, 6(2), 58-62.

Godbey, G. C. (1989). The Future of Leisure Services: Thriving on Change. State College, PA: Venture.

Gosse, V. F. & Sheppard, G. (1979). Attitudes toward physically disabled persons: Do education and personal contact make a difference? Canadian Counselor, 13, 131-135.

Harris, B. & Stripling, S. (1980). The patient on the receiving end, out of control. Cancer Bulletin, 32, 20-21.

Horenstein, D. (1978). Social pressure as a factor influencing sex differences in attitudes toward disability. Rehabilitation Psychology, 25, 209-213.

Ibrahim, F. A. & Herr, E. L. (1982). Modification of attitudes toward disability: Differential effect of two educational modes. Rehabilitation Counseling Bulletin, 26, 29-36.

Keilhofner, G. A. (1985). A Model of Human Occupation: Theory and Application. Baltimore: Williams & Wilkins.

Kelly, A. E., Sedlacek, W. E., Williams, E., & Scales, W. R. (1994). How college students with and without disabilities perceive themselves and each other. Journal of Counseling and Development, 73, 178-182.

Kirchman, M. J. (1987). Attitudes towards disability. Physical and Occupational Therapy in Geriatrics, 5, 51-63.

Lyons, M. (1991). Enabling or disabling? Students attitudes toward persons with disabilities. American Journal of Occupational Therapy, 45, 311-316.

Lyons, M. & Hayes, R. (1992). Student perceptions of persons with psychiatric and other disorders. American Journal of Occupational Therapy, 47, 541-548.

Makas, E. (1988). Positive attitudes toward disabled people: Disabled and non-disabled persons' perspectives. Journal of Social Issues, 44, 49-61.

McDaniel, J. W. (1969). Physical disability and human behavior. New York: Pergamon.

Mitchell, K. R., Hayes, M., Gordon, J., & Wallis, B. (1984). An investigation of the attitudes of medical students to physically disabled people. Medical Education, 18, 21-23.

Oberle, J. B. (1975). The effect of personalization and quality of contact on changing expressed attitudes and hiring preferences toward disabled persons. Dissertation Abstracts International, 37, 2144 A.

Pegles, C. C. (1988) Health Care and the Older Citizen. Rockville, MD: Aspen.

Peloquin, S. (1993). The depersonalization of patients: A profile gleaned from narratives. The American Journal of Occupational Therapy, 47, 830-837.

Rousch, S. (1986). Health professionals as contributors to attitudes toward persons with disabilities. Physical Therapy, 10, 1551-1554.

Ryan, K. M. (1981). Developmental differences in reactions to the physically disabled. Human Development, 24, 240-256.

Sabari, J. (1985). Professional socialization: Implications for occupational therapy education. American Journal of Occupational Therapy, 39, 96-102.

Scheer, J. & Groce, N. (1988). Impairment as a human constant: Cross-cultural and historical perspectives on variation. Journal of Social Issues, 44, 23-37.

Schlaff, C. (1993). From dependency to self-advocacy: Redefining disability. The American Journal of Occupational Therapy, 47, 943-949.

Simpson, J. A. & Weiner, E. S. C. (1989). The Oxford English Dictionary (2nd ed.). Oxford: Clarendon Press.

Slagle, E. C. (1922). Training aides for mental patients. Archives of Occupational Therapy, 1, 11-18.

Volinn, I. J. (1983). Health professionals as stigmatizes and destigmatizers of diseases: Alcoholism and leprosy as examples. Social Science Medicine, 17, 385-393.

Westbrook, M. T. & Adamson, B. J. (1989). Knowledge and attitudes: Aspects of occupational therapy students' perceptions of the handicapped. Australian Occupational Therapy Journal, 36 (3), 120-130.

Wolfensberger, W. (1983). Social role valorization: A proposed new term for the principle of normalization. Mental Retardation, 6, 234-239.

Wood, P. H. N. (1980). International classification of impairments,

disabilities, and handicaps: A manual of classifications relating to the consequences of disease. Geneva: World Health Organization.

Wright, B. A. (1980). Developing constructive views of life with a disability. Rehabilitation Literature, 41, 274-279.

Yerxa, E. J. (1980). Occupational therapy's role in creating a future climate of caring. American Journal of Occupational Therapy, 34, 529-534.

Yerxa, E. (1983). Audacious values: The energy source for occupational therapy practice. In Kiehlhofner (Ed.), Health through occupation: Theory and practice in occupational therapy. Philadelphia: F. A. Davis.

Yuker, H. & Block, J. (1979). Challenging barriers to change: Attitudes toward the disabled. Albertson, NY: Human Resources Center.

Yuker, H. & Block, J. (1986). Research with the Attitude Toward Disabled Persons Scales (ATDP) 1960-1985. Hempstead, NY: Center for the Study of Attitudes Toward Persons with Disabilities, Hofstra University.

Yuker, H., Block, J., & Campbell, W. (1962). Disability Types and Behavior (Human Resource Study No. 6) Albertson, NY: Human Resources Center.

Yuker, H., Block, J., & Campbell, W. (1960). A scale to measure attitudes toward disabled persons: Human Resources Study Number 5. Albertson, N.Y.: Human Resources, 1960.

Yuker, H., Block, J., Youngg, J. (1966). The measurement of attitudes toward disabled persons. Human Resources Center, Albertson, N.Y.

Yuker, H., Block, J., & Youngg, J. (1970). The measurement of attitudes toward disabled persons. Human Resources Center, Albertson, N.Y.

APPENDIX A

Questionnaire

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**Appendix A
Attitudes Toward Persons with Disabilities
Pages 59 & 60**

University Microfilms International

APPENDIX B

Cover Letter

Dear Occupational Therapy Student,

I need your help in conducting a study on the attitudes toward disability of occupational therapy students at San Jose State. The results will make us more aware of occupational therapy students' attitudes toward disability and some of the factors that influence these attitudes.

Attached is a questionnaire that asks you to say whether or not you agree or disagree with several statements. There is also a section that asks you a few questions about yourself. Will you please take 15-20 minutes to complete the questionnaire? Please answer every question and do so as honestly as possible.

There are no anticipated risks or benefits associated with your participation in this study. The data I gather will be used for my research purposes only. Information you provide will never be associated with your name and any information that could possibly result in your identification will remain completely confidential.

You should understand that your participation is voluntary and that choosing not to participate in this study will not affect your relations with San Jose State in any way.

If you have any questions about this study, I will be happy to talk with you. I can be reached at (415) 345-5849. You may also contact Dr. Gordon Burton at (408) 924-3074. If you have any questions or complaints about research subjects' rights, please contact Serena Stanford, Ph.D., Associate Academic Vice President for Graduate Studies and Research, at (408) 924-2480.

Sincerely,

Linda Plachy
Graduate Student

APPENDIX C

Permission to use questionnaire

April 15, 1995
709 Varsi Pl.
Santa Clara, CA 95050

Charles C. Thomas, Publisher
2600 So. First Street
Springfield, IL 62794-9265

Dear Sir or Madam:

I am writing to you regarding a book your company published in 1988 entitled The Measurement of Attitudes Toward People with Disabilities by Richard F. Antonak and Hanoch Livneh. I wish to obtain permission to use a questionnaire on pages 142-143 called *The Attitude Toward Disabled Persons Scale Form B* which was originally printed by Yurker, Block, and Campbell in 1962.

I am a master's student in the Occupational Therapy Department at San Jose State University and I am interested in examining attitudes toward disability in occupational therapy students as part of a master's thesis.

Given permission, I will be reprinting this questionnaire and distributing it among approximately 150 students of occupational therapy at San Jose State. The information gathered will be used for my research purposes only.

I appreciate your attention to this matter.

Sincerely,

Linda Plachy

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2600 SOUTH FIRST STREET • SPRINGFIELD, ILLINOIS • 62794-9265 • U.S.A. (217) 789-8980 FAX 789-9130

May 2, 1995

re: Your letter of April 15, 1995 - re: Antonak THE MEASUREMENT OF
ATTITUDES TOWARD PEOPLE WITH DISABILITIES questionnaire, pp.
142-143 (One time use only)

Dear Ms. Plachy:

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