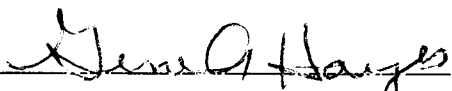
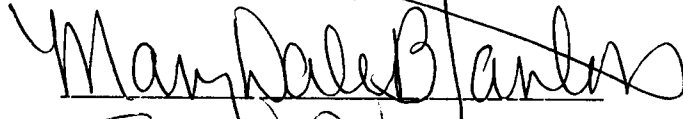
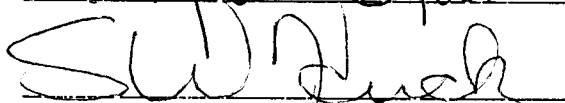


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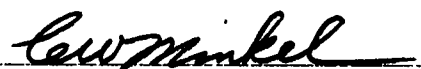
I am submitting herewith a thesis written by Julia Kershaw Higley entitled "The effects of an integrated recreation and education program on the attitudes of nondisabled middle and high school students toward their disabled peers." I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science with a major in Recreation and Leisure Studies.


Dr. Gene A. Hayes, Major Professor

We have read this thesis and
recommend its acceptance:

Accepted for the Council:


Associate Vice Chancellor and
Dean of The Graduate School

THE EFFECTS OF AN INTEGRATED OUTDOOR
EDUCATION AND RECREATION PROGRAM
ON THE ATTITUDES OF NONDISABLED MIDDLE
AND HIGH SCHOOL STUDENTS TOWARD
THEIR DISABLED PEERS

A Thesis
Presented for the
Master of Science
Degree
The University of Tennessee, Knoxville

Julia Kershaw Higley
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DEDICATION

This thesis is dedicated to my parents

George and Cheryl Kershaw

for always making me believe in myself and for constantly
loving, supporting, and motivating me to be my very best

and to my husband

Daniel Higley

for standing by me, loving me, and taking care of me
throughout my graduate program while never allowing
me to lose sight of what is really important in life.

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Lastly, I owe the world to my entire family for giving me the encouragement, support, and strength to accomplish what sometimes seemed to be impossible tasks.

ABSTRACT

The purpose of this study was to measure the effects of an integrated outdoor education and recreation program on the attitudes of nondisabled middle and high school students toward their disabled peers. Two sub-problems were also investigated: the effects of gender and the effects of various teaching methods on the attitudes of the nondisabled toward the disabled.

There were 28 subjects involved in the study; 14 in the treatment group, and 14 in the control group. The subjects were middle and high school students recruited from the Christian Academy of Knoxville and a home school group. The ages of the subjects ranged from 10-18, and there were 16 females and 12 males. The control group and treatment group were matched based on their age, gender, and pretest scores on the ATDP scale.

The Attitudes Toward Disabled Persons (ATDP) scale-Form B, developed by Yuker, Block, and Youngg in 1970, was used to measure the attitudes of the participants in this study. The ATDP was administered to the treatment and control group at three different times over the course of the program. Both groups were given the pretest before the program started. After the treatment group had completed a series of training sessions educating them and preparing them for the camp experience, both groups were given the midtest. The post-test was administered to both groups after the treatment group returned from the week-long Camp Koinonia where they were matched with a same-age, same-gender disabled peer. The control group received no training and did not attend the week-long camp experience.

The scores on the ATDP scale were analyzed for differences in the treatment group and the control group, differences in the treatment group after exposure to two different teaching methods, and differences in gender. Although many interesting patterns evolved, no significant differences were found at the .05 level.

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CHAPTER ONE

Introduction

Much research has been done in the area of integration of persons with disabilities into recreation programs with nondisabled peers and the positive effects it can have on attitude change. One thing that seems to be common in all the research is support for the contact theory which suggests that contact, regardless of the nature or type, with persons with disabilities is beneficial to positive attitude change of the nondisabled toward the disabled (Esposito & Reed, 1985). Another common suggestion by researchers is that even though this contact theory seems to hold true, service providers should take appropriate measures to ensure that the program is designed for optimal results. It is apparent that true integration is not met without emphasis being placed on social interactions. The aspect of making friends and improving the quality of life for disabled persons is repeated in the literature as a need that should be met through integrated programs. Without focus on this integral aspect of integration, it appears that such programs could be further socially isolating those with disabilities. It is suggested that time and effort be spent preparing persons with disabilities to successfully interact with their nondisabled peers including teaching appropriate social and leisure skills.

The implications for further research are apparent in all of the studies. Many of the researchers admit that their results are not highly generalizable. Others feel that more studies should be done to show the positive effects on both the disabled and the nondisabled of integrated recreation programs. None of the studies reviewed dealt with the effects of an integrated setting where the nondisabled children were peer counselors who had received prior training on

how to work with persons with disabilities. This research has attempted to investigate the effects of such an integrated program.

Statement of the Problem

The purpose of this study was to measure the effects of participation in Camp Koinonia, an integrated outdoor education and recreation program, on the attitudes of nondisabled middle and high school students toward their disabled peers. The nondisabled students in this study either attended a private Christian school in a suburban area of town, or were home-schooled. All subjects were tested using the Attitudes Toward Disabled Persons (ATDP) scale. The following sub-problems were also investigated as part of this research:

1. The effects of gender on the changing of attitudes of the nondisabled toward the disabled.
2. The effects of various teaching formats on the changing of attitudes of the nondisabled toward the disabled.

Definitions of Terms

Each of the following terms are defined both theoretically and operationally as they relate to the current study.

Attitude: A mental position or feeling with regard to an object. For the purpose of this study, attitude is measured with regard to position or feeling toward other individuals (more specifically, individuals with disabilities) and will be measured using the Attitudes Toward Disabled Persons (ATDP) scale.

Camp Koinonia: A residential week-long outdoor recreation and education program for person's with multiple disabilities between the ages of 7 and 21, attended also by nondisabled college students (counselors), and nondisabled middle and high school students (peer counselors).

Disabled: Having a limitation or limitations, whether it be physical, emotional, mental, social, or otherwise. For the purpose of this study, disabled refers to those who attend Camp Koinonia as campers rather than as peer counselors or counselors.

Integrated: Ending segregation of certain populations and bringing into common and equal membership in society or an organization. For the purpose of this study, integrated refers to a program attended by persons with and without disabilities.

Nondisabled: Not categorized as having a physical, emotional, mental, social, or other limitation. For the purpose of this study, nondisabled refers to the subjects of the study; those attending Camp Koinonia as peer counselors.

Teaching formats: The general plan or style used by a teacher in educating his or her students. For the purpose of this study, teaching formats will be (a) in class instruction by teacher about persons with disabilities, and (b) actual experience with persons with disabilities at camp.

Assumptions

The validity of the results of this study are based on the assumption that the subjects have reported honestly their attitudes toward persons with disabilities on the self-report questionnaire.

Limitations

There could be outside-of-the-study effects on the subjects attitudes toward persons with disabilities that could potentially skew the results of the ATDP scale. The researcher attempted to account for these outside-of-the-study effects by including a question referring to previous contact with disabled persons on the pretest, midtest, and post-test, as well as asking about the nature of the contact. Any subjects with extensive previous contact, or outside of the study contact, with persons with disabilities were taken out of the subject pool, so as not to skew the data.

Delimitations

The subjects for this study were not randomly selected due to the fact that they voluntarily signed up to take part in the Camp Koinonia Program. The subjects were then selected, making this a quasi-experimental design rather than a true experimental design. All of the subjects were recruited to take part in the Camp Koinonia Program by viewing a ten minute slide presentation of Camp Koinonia, along with commentary from both the Camp Director and Program Director about the rights, needs, and abilities of persons with disabilities. This preliminary information may have had an effect on the scores of the subjects (increasing their scores before the treatment was given) on the Attitudes Toward Disabled Persons (ATDP) scale, which may subsequently

have had an effect on the change occurring from pretest to post-test.

Significance of the Study

It was the intention of the researcher to investigate whether or not nondisabled students who participated in the Camp Koinonia Program experienced a positive attitude change toward their disabled peers. Although no attitude change can be conclusively related to participation in the Camp Koinonia program, it is possible to show whether or not a change occurs. Keeping in mind all alternative factors which may have had an effect on the students, a positive attitude change might still influence other school administrators, as well as parents, to allow their nondisabled students to attend Camp Koinonia in the future. The purpose for wanting nondisabled students to take part in the Camp Koinonia Program was to enhance the camp experience for the disabled campers by allowing them to develop friendships with nondisabled peers, facilitate the development of appropriate social interaction skills, and help change the attitudes of the nondisabled students toward persons with disabilities. It was the hope of the researcher that more integrated recreation programs might be initiated in the Knoxville area as a result of the findings of this study.

Summary

This chapter has introduced the problems that are being investigated in the current research study. Definitions specific to this study have been given in an attempt to familiarize the reader with the concepts being used. The assumptions, limitations and delimitations of this study have been explained, as well as the significance of the study to the researcher.

CHAPTER TWO

Review of Literature

The purpose of this review was to explore the current status of research on the topic of integrated recreation programming and its effects on the positive attitudes of the nondisabled toward the disabled. The review begins with an overview of the basic philosophy of inclusionary integration and continues with abstracts of current studies done in this area of research.

Basic Philosophy of Integration

Integration of persons with disabilities into recreation programs with the nondisabled has been a topic of much debate over the last several decades. Based on her own review of literature in this field, Dr. J. A. Decker (1987) found that the process of integration had been the implicit goal of normalization for some time. Yet we are still fighting the misconceptions of many who believe that if a person is present in an integrated setting, then he or she is integrated into the program. Decker (1987), along with many others, suggested that merely having access to opportunities did not necessarily make one a part of what was going on. She contended that until the social integration of people with disabilities took place, we still would not have accomplished our goal of integration.

There have been and still are many views of integration. Decker (1987) found in her research that many have felt that bringing non-disabled people to a segregated setting for the disabled, or bringing a small group of persons with disabilities to a regular setting, or simply anything that a person did that was not in a segregated setting was integration. The problem with these views was that

the focus was primarily on the programs and not on the people. When the focus of integration has been moved toward the people involved, then true integration may have occurred. Research in this area has shown that this true form of integration was more likely to occur when the social aspect of friendship development was included. This unfortunately was the hard part for many recreation programmers. This moved beyond just letting the disabled participate, to actually making them a part of what was going on. One thing that research has shown to be successful is the use of buddy systems where a disabled and nondisabled participant are matched up and go through the program together. This type of experience has shown to be quite positive for both of the participants (Decker, 1987).

Decker (1987) referred to social integration as building community. She referred to "community" as more than just a location or a neighborhood, but rather as a social bonding that takes place among people who genuinely care about each other. She felt that a good community committed to its members must be facilitated and not merely left up to chance. In trying to facilitate this kind of atmosphere in a recreation program, Decker (1987) believed that it was imperative that the staff create a warm atmosphere, foster the acquaintances of the participants, and allow opportunities for trust to be built. Out of these basic elements, friendship and group cohesion would emerge.

Decker (1987) concluded that building a successful community environment involved much planned intervention on the part of the staff. She believed that recreation provided an excellent opportunity for building group cohesion. As people came together with similar interests and goals and worked together to pursue them, they would build relationships which extended beyond the recreation program and on into their everyday lives.

Believing also in the social aspect of true integration, Schleien, Fahnstock, Green, and Rynders (1990) felt that it was imperative that positive social networks be built into integrated recreation programs. The information presented in their writings was based on their own previous research as well as that of many others in the field of therapeutic recreation and special education. The purpose of their research was to present different strategies for facilitating the social integration of persons with disabilities into community recreation programs. Schleien et al. (1990) proposed several integrative strategies that therapeutic recreation specialists could use to prepare the environment for the socialization, learning, and integration of the targeted individual. These strategies included sociometry, circle of friends, and cooperative learning.

According to Schleien et al. (1990), many persons with disabilities lack the necessary skills to use their free time in an appropriate, healthy and social way. All too often this has inhibited their ability to successfully become integrated into the community. By working on this aspect of integration, they felt that the process would have a greater chance of being successful. Social skills can be learned through a variety of recreation activities. What Schleien et al. (1987) felt was a great help in successfully teaching these skills, was to use these integrative strategies to enhance the surroundings of the targeted individual and make it more conducive to learning and socialization development.

Sociometry involved a process whereby the service provider could assess the group's social dimensions and identify persons who were isolated or excluded. The group could then be restructured to facilitate the integration of these members back into the group while empowering the group as a whole (Schleien et al., 1990). Each member was asked to identify with whom he/she

would like to participate and with whom he/she would not, based on a given criterion. Their responses were written in private and the service provider then used them to group people together for whatever the activity at hand would be. This process helped facilitate the development of new friendships, new leaders, and new group dynamics.

The Circle of Friends technique involved preparing a small group or "circle of friends" to assist the target person in his/her integration process (Schleien et al., 1990). The group was made up of close friends, service providers, family members, and significant others. The group leader would facilitate discussion about the target individual's dreams, nightmares, likes, strengths/gifts/abilities, and needs. The group would explore those things that were barriers to inclusion and then work to come up with solutions to these problems. Together, the group would develop a plan of action for successfully integrating the individual with the disability into mainstream programs.

The third integrative technique that was discussed by Schleien et al. (1990) was cooperative learning. The main emphasis of cooperative learning was actively promoting people-to-people interactions through three processes: preparing the nondisabled participants to be friends of the disabled, structuring the group dynamics in a way that promoted cooperation among the participants, and preparing the adult leaders to promote the ongoing positive integrative relationships (Schleien et al., 1990).

All three of these techniques were used to positively effect the target individual's environment in an attempt to make it more conducive to successful integration in learning, socialization, and friendship development. Schleien et al. (1990) believed that it was time to adopt a new way of thinking based on the premise that the community belongs to everyone, and everyone to it. They

believed that recreation served as a viable tool for integrative purposes and changes in attitude.

Green and Schleien (1991) also believed that integrative approaches needed to focus on socialization and the building of friendships. Based on their research, they felt that often times the disabled population, though integrated into programs, still lacked the ability to develop real friendships. They considered recreation to be a great tool for learning the social skills needed to be a good friend. Green and Schleien (1991) did feel however, that merely placing people with mental retardation in integrated recreation settings did not improve their social skills. Many had not had experiences outside of socializing with their disabled peers, and therefore did not know how to interact with nondisabled people. This left those who were providing such opportunities for the disabled with the responsibility of empowering these individuals with the ability to make friends with their nondisabled peers (Green & Schleien, 1991).

This review by Green and Schleien (1991) was based on three theories, the first being that many adults living in community residential facilities often did not develop meaningful, reciprocated friendships with their peers. Instead they perceived the staff of the facility, their family, or other caretakers or service providers to be their friends. What they believed contributed to this phenomenon was that many disabled children were not included by their nondisabled friends, and/or their parents had been too over-protective of them and had denied them opportunities to have such interactions (Green & Schleien, 1991). Therefore, these individuals had remained dependent on the social support of the adults in their lives, be it parents or caregivers, because these were the only people with whom they had experienced contact.

The second theory that was proposed by Green and Schleien (1991) was that persons with disabilities did not make friends during recreation activities, but rather, participated in recreation programs with their already acquired friends. This would seem to discount the positive effects of recreation participation on the development of friendships. However, Green and Schleien (1991) indicated that it may have been that recreation programs were not a place to make friends, but rather were a place to nurture friendships that had been made elsewhere and help them develop further. Like many other researchers, they too believed that recreational settings were good places to use cooperative goal setting and sociometry to facilitate successful social integration.

The third theory proposed was that the social skills that were exhibited in the segregated recreation settings were not the same as those required to successfully socialize in an integrated setting. In the segregated settings, Green and Schleien (1991) observed that there was very little sharing, team work, cooperation, concern for others, and genuine common courtesy or thoughtful behaviors.

Green and Schleien (1991) concluded by saying that they felt that the development of friendships should be of primary concern for anyone working with persons with mental retardation. They felt that not only did friendship enhance one's quality of life, but it also stimulated physical and emotional well-being. By incorporating social skill instruction into leisure counseling with the mentally retarded, Green and Schleien (1991) believed that the necessary skills could be developed to enable them to successfully interact with their nondisabled peers in integrated recreation settings.

Current research on the effects of integrated programs on the attitudes or perceptions of the nondisabled toward the disabled.

A study was conducted by Hamilton and Anderson (1983) to see if the attitudes of the nondisabled about persons with disabilities could be changed as a result of participation in selected integrated leisure activities. Their study involved exposing 144 undergraduates of a large university to varying degrees of contact with persons with physical disabilities in leisure settings. All of the subjects were students enrolled in an introductory recreation course. The sample consisted of 103 males and 41 females with ages ranging from 17 to 30. All subjects reported having no physical disabilities. The class was divided into three different discussion groups which the students signed up for prior to the start of the semester. The three discussion groups were randomly assigned to varying levels of treatment, meaning level of involvement with information about and/or exposure to persons with disabilities.

Hamilton and Anderson (1983) used a modified version of Solomon's Four Group Design (they used six groups, allowing for the comparison of additional treatments). The treatments and the control consisted of three 50-minute sessions conducted during regularly scheduled class periods on the campus. The first treatment group involved group participation in three leisure activities with five persons with physical disabilities. These students participated in bowling, pool, and wheelchair basketball, each on separate days for 50 minutes. The second treatment group received information that was presented in the three sessions on people with disabilities, with no actual contact with disabled persons. The class had a guest lecturer who spoke and presented written materials in addition to leading group discussions. The control group viewed three films unrelated to the topic of physical disabilities

followed by group discussions in their three 50-minute sessions.

All students were administered the Attitudes Toward Disabled Persons Scale (ATDP) along with a questionnaire of four items: age, sex, physical disability, and previous contact with disabled persons. This was given to the students two days before their treatments began and then again two days after the treatments were completed. Analysis of variance was used to analyze all data, with a significance level of .05 for each analysis. Hamilton and Anderson (1983) hypothesized, in the null form, that the students who participated in the integrated leisure activities would not show significant changes in their attitudes toward disabled persons. The results of the study did indicate that the effects of the activity treatment on the attitudes of the subjects was significantly greater ($p < .05$) than that for the control group. There were no significant attitude differences, however, in the activity treatment group and the information treatment group at the .05 level.

The second null hypothesis, which was not rejected, stated that the students who received information related to persons with disabilities would not show significant changes in their attitudes toward disabled persons (Hamilton & Anderson, 1983). The ATDP scores of this group did not differ significantly from those of the control group.

According to Hamilton and Anderson (1983), the results of this study did not support the effects of the common information campaigns utilized to try to educate the public about persons with disabilities. On the contrary, their results showed clearly the positive effects of actual participation in integrated leisure activities on the ability to change peoples' attitudes towards persons with disabilities. Hamilton and Anderson further stated that even though there had been an increase in integrated recreation programming, that more needed to be

done to insure inclusion of persons with disabilities. They felt that therapeutic recreation specialists should take the initiative to educate their fellow leisure professionals about the abilities of the disabled and how to include them in already existing programs instead of always providing "special" programs for the disabled.

A similar study was conducted by Kisabeth and Richardson (1985) for the purpose of measuring the effect of equal status, close personal contact with one disabled person on the changing of attitudes toward disabled persons. The subjects were undergraduate students, N=41, who were enrolled in two beginning instructional racquetball classes. The two classes were matched by class size, gender of the instructor, and time schedule, each meeting two afternoons a week for 75 minutes each day and taught by female instructors. The experimental group consisted of 14 males and 9 females, while the control group had 9 males and 9 females. The sample included students of a broad range of majors with an age range of 18 to 29. No students reported having any physical disabilities.

A pretest/post-test design was used by the researchers. All students completed the Attitudes Toward Disabled Persons (ATDP) Scale and a survey questionnaire at the second class meeting of the semester. The survey questionnaire included some questions about previous contact and experiences with persons with disabilities as well as some demographical information. Two days after the pretests were given, a female student with a physical disability joined the experimental class as an enrolled student (Kisabeth & Richardson, 1985). The disabled student was actually an Assistant Professor in the Recreation Department and co-author of this article. She was a T1 spinal cord injured paraplegic. She remained in the class for the remainder

of the semester. The class was set up so that everyone rotated around being instructional as well as competitive partners with everyone else, giving everyone a chance to be competitively and noncompetitively matched with the physically disabled female. The instructor, as well as the physically disabled female, reminded the group of what modifications needed to be made for her to fully be able to participate every session before play began. The ATDP was again administered to both classes at the end of the semester. The physically disabled female was not present at the time of the pretest or the post-test, and after taking the post-test, the experimental group was debriefed and informed of the true identity of the disabled female.

The data that were analyzed involved four variables: ATDP scores, instructional integration score, recreational integration score, and competitive sports score (Kisabeth & Richardson, 1985). For each score, the researchers performed a separate repeated measure ANOVA. Though the ATDP scores from the pre/post-tests were not found to be significantly different at the .05 level, the treatment group was shown to test more positively than the control group.

The results of this study indicated that even being integrated with one disabled person could have positive effects on the attitudes of college students in recreational settings (Kisabeth & Richardson, 1985). This should have been particularly encouraging to those disabled individuals who tended to venture out and participate in activities with primarily nondisabled students. Kisabeth and Richardson (1985) also felt that those individuals with physical disabilities who wished to become more independent must assume some of the responsibility for helping facilitate the attitude change, instead of depending on the service providers to create situations where they could take part.

While the previous two research studies involved college-age students, the research done by Esposito and Reed (1986) focused on the effects of contact with disabled persons on the attitudes of young children. This study was designed as a follow-up study to an earlier one done by Esposito and Peach in 1983 where it was found that attitudes toward disabled children could be made more positive as a result of direct, structured contact with disabled peers. Esposito and Reed (1986) looked at the long-term effects of participation in an early structured integration program on the attitudes of the nondisabled children toward the disabled children, as well as the type of contact (structured versus unstructured versus no contact) and the time of contact (present versus past versus no contact).

The subjects for the present study included the nine original subjects of Esposito and Peach's earlier study who had been integrated with 4 severely disabled students for 21 sessions. These nine subjects were categorized as the structured-contact (SC) group. Eighty three no-structured-contact (NSC) students were interviewed. These students were randomly chosen from the class rosters of the 9 SC students (10 from each SC students class, minus 7 who did not show up for their interviews).

Esposito and Peach, in their 1983 study, developed the Primary Student Survey of Handicapped Persons (PSSHP) for use with very young prereading children. The PSSHP was again used in the present study. According to Esposito and Reed (1985), the survey was orally administered to each subject and was as follows:

1. Tell me everything you know about a handicapped person.
2. Do you like handicapped people?
3. Do you have any handicapped friends?
4. Can you get sick playing with handicapped people?

5. Are you ever afraid of handicapped people?
6. Do you think that handicapped people seem a lot like you, or do they seem different from you? (p.226)

The responses were tape recorded and later transcribed onto individual rating sheets to insure accuracy. Any negative responses regarding handicapped persons were given a score of 0, neutral responses were scored as 1, and positive responses were given the score of 2. The PSSHP did score 95% on inter-rater reliability. The PSSHP was given as a follow-up measure to the pretest and posttest given two years earlier to the original nine subjects (the now SC group). The test was only given once to the NSC group, at the end of the semester. Along with the interview, each child's parents were contacted to get permission for their involvement in the study and information about the amount of contact and time frame was elicited at that time from the parents. This information was used to subdivide the groups according to type of contact and time frame.

It was determined that the positive attitude over the two year period for the original nine subjects was maintained using a single factor ANOVA with repeated measures (Esposito & Reed, 1985). The follow-up mean score was found to be significantly greater at the $p < .01$ level than the pretest scores indicating an increase in positive attitudes, but the difference in the post-test scores and the follow-up scores was not found to be significantly different at this level. Based on these results, it is possible to say that positive attitudes can be maintained over time. Other results found that the attitudes of the structured ($p < .05$) and unstructured groups ($p < .01$) were significantly more positive than those of the no-contact group, but a significant difference was not seen between the structured and unstructured group at the .05 level. The same was

found for the present and past time frame groups in relation to the no-contact group. Once again, there were no significant differences between the two contact groups, past and present.

Esposito and Reed (1985) found that their data suggested support for the "contact theory" of attitude change. This theory contended that contact of any sort, regardless of type or timing, had the potential to positively affect the attitudes of the nondisabled toward the disabled. The results of the present study not only indicated that contact improved attitudes, but also that positive gains could be retained over a period of time. Esposito and Reed (1985) concluded by saying that even though it had been shown that contact of any type could positively affect attitudes, they still believed that people who were designing integrative programs should make sure to use techniques and strategies that would produce optimal results for those involved.

A study by Leyser, Cumblad, and Strickman (1986) was designed to evaluate the effects of an integrated program on the changing of attitudes of elementary school children toward the disabled by using many strategies reported to be successful in research of this area. The researchers also looked at whether or not a program of this sort could be planned and implemented effectively by community volunteers rather than trained professionals. Two hundred eighty one fourth and fifth graders in five public schools in a midwestern mid-size rural community were the subjects of this study. The researchers reported that the subjects represented a mix of all socioeconomic levels.

Leyser et al. (1986) used the pretest-posttest design with experimental and control groups. There were five class rooms totaling 132 students in the experimental group, and five classrooms totaling 149 students in the control

group. The Attitudes Toward Disabled Persons (ATDP) scale was the instrument used for the pretest and posttest. The ATDP was administered to the experimental and control groups by their teachers at the beginning of the semester before the treatment began and then again at the end of the semester after the treatment had ended.

The treatment program used was called "The Learning About Handicaps Programme (LAHP)" and it was implemented by trained volunteers. The main objective of this program was to provide nondisabled students with information about many different disabling conditions in an attempt to foster more positive attitudes toward persons with disabilities, including greater awareness, sensitivity, and acceptance of students with disabilities. During twenty classroom hours, the volunteers provided information about five areas of disabilities including visual impairments, hearing impairments, physical limitations, mental handicaps and special medical conditions (Leyser et al., 1986). The classes consisted of a variety of techniques including group discussions, simulations, guest speakers, films, sign language, and individual participation. Some of the guest speakers were person's with disabilities while others were professionals in the field or in related fields.

The data from the pretest-posttest of the ATDP were analyzed using a 2x2 (Group x Sex) ANOVA of the mean scores. The results showed that there were no significant differences based on sex, but that there was significant mean effect between the treatment group and the control group at the .002 level.

The results of this study implied that this type of intervention including many highly researched approaches (contact with persons with disabilities, giving information about disabilities, and actively participating in role playing

and simulations) was quite effective in changing the attitudes of nondisabled elementary school age children toward people with disabilities. The results also indicated that these positive effects could be brought about by trained volunteers and did not necessarily require the work of school professionals. Leyser et al. (1986) concluded by saying that as the responsibilities of the educational system were changing, these professionals should be looking to the community for help in fostering positive integration. Based on this study, it is obvious that much good can come from a volunteer-implemented program of this sort.

Another study involving children was conducted by Schleien, Krotee, Mustonen, Kelterborn, and Schermer (1987). The purpose of their study was to measure the effect of an integrated program on the behavior patterns of severely disabled autistic children. They also assessed the attitude change of the nondisabled students who were integrated into the program with the autistic children.

The subjects for this study were two severely disabled autistic children; one female (age 8 years, 5 months), and one male (age 11 years, 2 months). The study also involved 67 nondisabled students between the ages of 7 and 12 who were enrolled in the University of Minnesota Children's Sport Fitness School (CSFS).

The CSFS was a three-week summer program held on the University of Minnesota campus. The staff at the camp were salaried graduate students who observed a "Special Friends" slide presentation as part of their training for the integrated program. This same slide presentation was also shown to the nondisabled children at the camp to prepare them for the integration of the two students with autism. This was followed with a brief question and answer

session geared at helping them feel more comfortable and knowledgeable about the situation. Three buddies were then chosen for each child with autism, one for each week of the program (Schleien et al., 1987). All of the children participated in physical and recreational activities, including cooperative, competitive, and individual play.

An attitude acceptance scale was administered to the nondisabled peers before the program began and then again after the program was over. This test measured social contact willingness, deviance consequence and actual contact (Schleien et al., 1987). The results of the attitude acceptance scale indicated insignificant ($p < .05$) but positive changes of attitudes. The researchers reported that this might have been attributed to the unusually high pretest scores of this group compared to the national average.

Along with the positive behavioral changes seen in the disabled students who participated in this integrated camp program, the positive attitude changes of the nondisabled seemed to suggest that the integration of severely disabled autistic children into a recreation setting was beneficial to all involved. Schleien et al. (1987) felt strongly, however, that an attempt at integrating such children should not be made without employing proper strategies to facilitate positive outcomes. The strategies used in this study included concern for personal preferences of activities for the disabled children, cooperative group structure for all of the children, and the use of the "Special Friends" presentation in the training process.

Another angle was investigated by Hoenk and Mobily (1987) when they attempted to determine the effects of previous exposure and salience of disability on the attitudes of nondisabled preschoolers toward persons with disabilities. The researchers predicted that previous exposure to persons with

disabilities would have a positive effect on preschooler's receptiveness to interaction with them, but that the salience of the disability would also affect their attitudes.

The subjects in this study were 15 nondisabled preschool children between the ages of 4 and 5 who were enrolled in one of two preschools in a medium-sized midwestern university town. One of these preschools was mainstreamed and the other was not. Each of the subjects was given a test to measure their attitude toward interaction with disabled children. The test involved showing each individual a series of four pictures and asking them to rate their attitudes toward playing, reading, eating, and talking with the child in the picture (Hoenk & Mobily, 1987). Instead of giving verbal responses, the children were asked to rate with smiling/sad faces, a Likert-type scale, how they felt about each situation. The subjects were then divided into subgroups on the basis of having school exposure to disabled children (those who attended the mainstream school), home exposure (not attending the mainstreamed school, but having outside of school interactions with disabled persons), and low exposure (not attending the mainstreamed school, and reporting having no previous interactions with disabled persons). Hoenk and Mobily (1987) measured the effect of the salience of disability by showing four different cards which ranged from an extremely conspicuous disability (an amputee), to mildly conspicuous (one obese and one in a wheelchair), to absence of disability (able-bodied). The children were asked to rate their willingness to interact with these four different people, including playing, reading, eating and talking.

This study was a 3 x 4 split plot design. Although there was not a significant difference in attitudes between the school exposure group and the home exposure group, the results did indicate that the tendency to be more

positive about interacting with a disabled child improved with more exposure to disabled peers, but this was not independent of the type of disability. Hoenk and Mobily (1987) concluded that these results were supportive of the "collective impact" theory which suggests that exposure and salience of disability have effects on the receptiveness of young children to interact with persons with disabilities. This supported the positive notion of integration on the attitudes of young children.

A somewhat different study was done by McAvoy, Schatz, Stutz, Schleien and Lais (1989). These researchers looked at the effects of an integrated wilderness trip on the personal lifestyle traits of the nondisabled and the disabled. This study was based on the theoretical framework of anxiety and self-concept to determine the effects of participation in the program on the personal and lifestyle traits.

McAvoy et al. (1989) used two instruments to measure the effects of this program, the first being a standardized self-evaluation questionnaire exploring trait anxiety levels. The second instrument was an in-depth structured interview. The Trait Anxiety Scale was given to three experimental groups and to one control group which consisted of persons with and without disabilities who were participating in a 4-hour non-wilderness, outdoor recreation activity. All subjects were asked to take the test immediately prior to participating in the program, immediately following the program, and then again 3-4 weeks later (follow-up). The interviews were conducted over the phone with 40 randomly chosen participants (24 with disabilities and 16 without) after the follow-up Trait Anxiety Scale was completed.

The results of the interviews showed that 100% of the respondents would participate again in an integrated recreation program and that they would

recommend it to their friends. The general response of the whole group focused on their eye-opening experience to the understanding of persons with and without disabilities (McAvoy et al., 1989). Seventy eight percent reported that they could see long-term changes in their lifestyle as a result of this program. Based on the interviews with all of the respondents, the researchers found that there were primarily six areas that were positively affected by participation in this program. These included "interpersonal relationships, recreation skills and patterns, attitudes towards persons with disabilities, tolerance of others, tolerance of stress, and skills in approaching new situations (McAvoy et al., p. 59)." The positive change in attitude toward persons with disabilities was acknowledged by 58% of the persons with disabilities and 69% of those without. The persons with disabilities learned to be more patient and understanding of others with disabilities and made new friends with other disabled people, while the majority of the nondisabled participants discovered the abilities of the disabled and recognized how truly human they really were, with similar needs and desires as the nondisabled (McAvoy et al., 1989).

McAvoy et al. (1989) concluded that this study showed that wilderness adventure programs can have profound effects on the positive change of attitudes toward persons with disabilities as well as many other lifestyle traits. They also reminded those who wished to program such adventure trips for the disabled to be careful not to plan only for the therapeutic effects, but rather for the same reasons able-bodied persons like to participate. Some of these motivations included enjoyment, feelings of accomplishment, and opportunities to connect with the environment and test one's own limits.

A later study testing the contact theory was done by Roper (1990) involving the perceptions of Special Olympics volunteers toward persons with

mental retardation. He was particularly interested in whether or not the debatable components of the contact theory must be considered in order for there to be a positive attitude change. The components included the behaviors that were the outcomes of the situations, and the person's previously held stereotypes of people with mental retardation (Roper, 1990). Other components involved equal status, cooperative interdependence, support of authority figure, and the opportunity to interact. The purpose of this study was to examine how successful the contact theory was in changing the perceptions of the Special Olympics volunteers toward the athletes. Roper (1990) hypothesized that contact with persons with mental retardation at the Special Olympics would indeed improve the perceptions of the volunteers, and that a more positive perception would be linked to having had more experience with the athletes.

Subjects were recruited as the volunteers arrived at the Special Olympics state games. They were asked by the researcher to fill out a questionnaire, and of all the questionnaires passed out, 369 were completed. This sample represented approximately two thirds of the volunteers (without athletes) in attendance that day. The questionnaire used in this study was made up of three parts. The first part contained biographical information, including amount of contact with persons with mental retardation. The second part was based on a social psychological conceptualization of perceptions that people have toward persons with mental retardation (Roper, 1990). The third section was a true or false list of commonly held beliefs about persons with mental retardation and about Special Olympians.

The procedure involved having the volunteers fill out the questionnaire while they waited in line to get into the state games. The data was examined and the group of subjects was then divided for analysis on the basis of (a)

number of state games attended, (b) experience with Special Olympics, and (c) previous experience with persons with mental retardation (Roper, 1990). The perceptions and the beliefs scales of the questionnaire were analyzed based on these three variables.

The analysis of results showed that there was a significant difference ($p < .05$) between the scores of several groups for the variable of previous experience with persons with mental retardation. The results of the variables of number of state games attended and previous experience with Special Olympians showed less significant results. This led Roper (1990) to believe that the state games did not provide an atmosphere optimal for perception change to occur.

Though Roper's (1990) study may not have supported the notion that volunteering at Special Olympics fosters significant perception change it did show that previous experience with persons with mental retardation had a very positive effect on the public's perception. This seemed to support the theory that minimal contact, regardless of type, did have a positive impact on the perceptions of the nondisabled toward the disabled.

Vandercook (1991) did a study involving leisure skill instruction on the acceptance of students with disabilities by the nondisabled students who participated in the study. Though not the primary purpose of the study, Vandercook (1990) examined the attitude changes of the teenagers without disabilities who participated in leisure activities with their disabled peers.

The study involved five high school students with severe mental and physical disabilities who were not mainstreamed, as well as five nondisabled students attending the same midwestern suburban high school. The nondisabled students had been randomly selected from a group that had

viewed a "Special Friends" film.

The five disabled students were instructed in leisure skill development in two areas: bowling and pinball. Vandercook (1990) measured three dependent variables including leisure skill demonstrated by the students during instruction with teacher, leisure skill demonstrated while participating with their nondisabled peers, and the social interaction that occurred during the leisure involvement between peers. The attitudes of the nondisabled students were measured in a pre/post test manner using The Acceptance Scale developed by Voeltz in 1981 (Vandercook, 1990). This test encompassed the realms of social contact willingness, actual previous contact with persons with physical disabilities, peer affiliation-adaptiveness, and previous contact with persons with mental retardation. This test was administered one week prior to being given information about the students with disabilities, and again after the program was over.

The results of The Acceptance Scale pre/post test were found to be significantly different at the $p < .05$ level. All of the students showed a much more positive attitude toward disabled students after participating in this study. Vandercook (1990) also reported that verbal feedback from these nondisabled students changed from "they" to identifying specific individuals as friends. These results indicated that a bond was formed between the nondisabled and the disabled after participation in this leisure program.

Rees, Spreen, and Harnedek (1991) attempted to show that attitudes toward persons with disabilities could shift over time. They replicated and compared the results of a 1975 study involving attitudes of undergraduate students toward persons with mental retardation. The subjects in this study were 191 undergraduate students attending the University of Victoria. The

sample consisted of an experimental group (n=106) and a control group (n=85). The students in the experimental group were enrolled in a two-year consecutive upper-level psychology class that dealt specifically with developmental disabilities. The students in the control group were either taking an upper-level economics class or a psychology methods class, neither giving detailed instruction on the topic of mental retardation. The results of the 1975 study which were used for comparison purposes involved 35 students in a similar experimental class and 53 in a psychology methods class. The samples were similar in that both studies were conducted at the same university, and the experimental class was taught by the same instructor both times (Rees et al., 1991).

Rees et al. (1991) used a rating scale to assess the direction and intensity of the students attitudes toward specific concepts: mentally retarded, mentally handicapped, learning disabled, physically disabled, mentally ill, and emotionally disturbed. The scale was administered to all subjects at the beginning and end of each scholastic year in the study (September and March). The treatment received by the experimental group consisted of classroom instruction and weekly exposure to people with mental retardation. Beyond this exposure, about 50% of the students in the experimental group chose to volunteer with persons with disabilities for 60 hours at various agencies (Rees et al., 1991). The control group received none of this structured exposure, though it may be possible that they experienced other means of information, for example, through the media.

The results of the 1975 study and the present study were analyzed by multivariate analysis of variance. The results showed that the pre/post test based on the exposure to knowledge of persons with mental retardation made a

significant difference in the scores on the rating scale ($p < .01$). However, there was a positive shift in attitudes of both the experimental and control groups over the two year period. The results, when compared with those of the 1975 study revealed also a significant increase in positive attitudes toward disabled persons in the present subjects.

Rees et al. (1991) confirmed that attitudes toward disabled persons became more positive over time, however, they did not solely attribute this to their intervention. They believed that the media over the last 13 years could have been one explanation for this result. They also considered another alternative, the increased numbers of persons with mental retardation being integrated into society as opposed to 13 years ago. Finally, Rees et al. (1991) suggested that the difference may have had something to do with the change in government and social policy regarding persons with disabilities. The researchers concluded by saying that it was probable that an overall awareness of persons with disabilities had positively affected the attitudes of the nondisabled.

An example of an integrated camping program was the topic of research done by Sable (1992). The purpose of her article was to present a model of integration as well as to show descriptive data on the effects of the program on the changing of attitudes of the nondisabled toward the disabled. This study revealed benefits of integrated programs for all participating, disabled and nondisabled.

The camp involved integrating an Easter Seals segregated camp in New Hampshire with a local Boy Scout camp and a Music Camp for boys and girls. The camp ran seven weeks during the summer, with approximately 200 children in attendance each week, 10% of those being disabled (Sable, 1992).

All of the campers were between the ages of 10 and 15. All of the campers with disabilities were integrated into the normal activities of the camp, with the exception of sleeping quarters. The scout troops that came to camp together also slept together, leaving the disabled students sleeping in other quarters. Other than that aspect, all campers ate together and participated in activities together. Adaptations to activities were made as needed with regard to the ability of the disabled students to participate. It was hoped by those who designed the camp that spontaneous friendships between the disabled and nondisabled campers would form. There were ample opportunities for social interaction among the different campers to occur.

Three instruments were used by Sable (1992) to measure the attainment of the goals set out by the integrated program. These instruments were used to measure leisure interest participation, social interaction, and inclusion. Beyond these three measures, an assessment of the attitudes of the nondisabled campers toward the campers with disabilities was also conducted, based on the ATDP developed by Yuker in 1960. The tests were not analyzed for statistical significance, but results showed that positive attitudes toward persons with disabilities were found to be even more positive at the end of each week than at the beginning (Sable, 1992).

These results suggested that the perceptions of 10 to 15 year old children were positively affected with regard to disabled peers after participating in an integrated camp setting. A follow-up questionnaire was sent out to all parents approximately two weeks after their children returned from the camp, and these results showed that overall the parents believed the integrated setting to be a positive experience for their children. More specifically, 88% of the parents believed the integrated setting created more opportunities for social

interaction to occur between children of varying ability, as well as increasing children's awareness of person's with disabilities (Sable, 1992).

Sable (1992) concluded by saying that integrated camp settings could have powerful effects on both the disabled and the nondisabled. Increased awareness, respect, and friendships are just a few of the potential benefits of participating in such a program. She contended that more integrated programs of this sort needed to be made available for children in the future.

A final study done by Peck, Carlson, and Helmstetter (1992) measured the perceptions of parents and teachers about the outcomes of early childhood integrated programs. Their study was carried out in two phases. The first being a qualitative study done to gather information on real outcomes perceived by the parents and teachers of children who had participated in integrated programs. The findings were used to develop a measurement tool for testing the perceptions of the subjects in the second phase. The second phase involved quantitative measurement of the perceptions of parents and teachers who were directly involved in school-based integrated preschool and kindergarten programs across the state of Washington.

Five teachers and five parents of nondisabled children participating in integrated programs with disabled peers were the subjects of phase one. Each subject was given a semi-structured interview by one of the authors of this study. The questions were based on what their expectations of the integrated program were for the nondisabled children, what the results were, what the benefits to the nondisabled children were, what, if any, negative effects were seen as a result of participation, and what positive and/or negative outcomes were experienced by them personally (the teacher or the parent) (Peck et al., 1992). The outcomes of these interviews revealed four categories of perceived

benefits, and one of concern about integrated programs. These categories were: increased comfort with human differences, increased acceptance of others (reduction of prejudices), learning to respond to the needs of others, awareness and sensitivity of others, and less attention of the teacher (Peck et al., 1992). These outcomes were made into a Likert-type scale to be used for phase two of the study.

Phase two of the study involved 125 parents and 95 teachers directly involved in the school-based integrated programs of Washington State. They were administered the Likert-type scale developed based on the outcomes of phase one and were asked to show their measure of agreement and disagreement to the perceptions listed on the scale. An open-ended question was also included to elicit additional information. Questionnaires were returned by 44% of the parents and 60% of the teachers surveyed. Results were consistent with previous research findings done with similar populations. Of strongest agreement on the part of the parents was that their child's integrated experience had been a positive one. Strong agreement was also shown with regard to their child's increased acceptance of others, reduction of stereotyping, increased awareness of others, and increased willingness to help others (Peck et al., 1992). The perceptions of having less teacher time and nondisabled children picking up undesirable behaviors from the disabled children were among the highest in disagreement, suggesting that these were not commonly held perceptions of parents. Teacher's perceptions were very much like those of the parents.

Peck et al. (1992) concluded by saying that their results seemed to support their hypothesis that parents and teachers of nondisabled children perceived positive outcomes of integrated programs. They felt that their findings

were consistent with previous research findings and gave support to the idea of furthering integrated programs for children.

Summary

It is apparent that much research has been done in the area of integration of persons with disabilities into recreations programs with nondisabled peers. Positive effects on attitude change have repeatedly been noted as a result of such programs. Support for the contact theory seems to be one common theme that has evolved from much of the research done in this area. Researchers do agree, however, that even though the contact theory seems to hold true, it is imperative that service providers take appropriate measures to ensure optimal results for those participating in their programs. Many believe that true integration is not achieved without emphasis being placed specifically on social interactions between the disabled and nondisabled. Repeatedly it is said that the most important focuses of integrated programs should be to assist in the making of friends and to improve the quality of life for persons with disabilities. Researchers suggest that in order to maximize the effects of social integration, much time and effort should be spent preparing disabled individuals to successfully interact with their nondisabled peers, which includes teaching appropriate social and leisure skills prior to and throughout integration.

CHAPTER THREE

Methodology

The purpose of this study was to measure the effects of participation in Camp Koinonia on the attitudes of nondisabled middle and high school students toward their disabled peers. This chapter explains all procedures used in the present study. The subjects are described as well as the method of selection. The instrument to be used, the ATDP scale, is discussed at length, as are all steps used by the Principal Investigator to collect and analyze the data.

Subjects

Subjects for this study were among those recruited from the Christian Academy of Knoxville and a Home School group to take part in the Camp Koinonia Program. These students attended five training sessions, based on the information taught to the college students enrolled in the University of Tennessee's class entitled "Outdoor Education for Disabled Children," and subsequently participated in the week-long residential Camp Koinonia. The Christian Academy of Knoxville (CAK) is a private Christian school in the suburban area of Knoxville, Tennessee. The home-schoolers participating in the study came from all over Knoxville and the surrounding areas. The sample represented students ranging in age from 10-17. The subjects were divided into two categories, the treatment group (N=14) and the control group (N=14). All subjects were shown the ten-minute Camp Koinonia slide show and were actively recruited by both the Camp Director and Program Director for participation in Camp Koinonia. The control group was chosen from students attending the Christian Academy of Knoxville who did not take part in the Camp

Koinonia Program, and the treatment group included all who did participate in the training sessions and week-long camp. The subjects in the control group and the treatment group were matched on the basis of gender and pretest scores on the ATDP scale. The groups were categorized as follows: (a) Treatment-female (TF, n=8), (b) Treatment-male (TM, n=6), (c) Control-female (CF, n=8), and (d) Control-male (CM, n=6).

Rationale for Instrumentation

The instrument used in this study was the Attitudes Toward Disabled Persons (ATDP) scale - Form B, along with a demographic questionnaire. The demographic questionnaire was used to ascertain age, gender, and previous contact with disabled persons (see Appendix A). This enabled the researcher to match the treatment and control groups, and eliminate anyone with extensive previous contact with persons with disabilities.

The ATDP scale was developed by Yuker, Block, and Youngg in 1970 and has had an impressive amount of research that supports its reliability and validity (Leyser, Cumblad, & Strickman, 1986). This instrument includes 30 statements to which the subjects are asked to respond indicating their agreement or disagreement. This Likert-type scale includes the following response choices: 1 (I disagree very much), 2 (I disagree pretty much), 3 (I disagree a little), 4 (I agree a little), 5 (I agree pretty much), and 6 (I agree very much). Examples of questions included in the instrument are "People who are disabled should not have to pay income taxes" and "Disabled people are no more emotional than other people" (see Appendix B for the complete instrument). Scoring involved giving points 1-6 to the respective number of the response, for example, 5 (I agree very much) would be given 5 points. The total

score for the 30-item instrument could range from 30 to 180, with a low score indicating that the perception of the nondisabled subject is similar to that of a disabled person (considered a positive attitude score), and a high score indicating dissimilarity between the disabled and nondisabled (considered a negative attitude score).

Procedures

All subjects in both the control and treatment groups were shown a 10-minute slide presentation about Camp Koinonia. Information letters, along with application forms for the Camp Koinonia Program, were mailed out to all parents of CAK students in grades 6-12. One of the teachers at CAK contacted several home-school families with whom she worked to let them know about the program. A student/parent meeting was held on February 6th, 1995 to further explain the program to the families who were interested. Applications were submitted by February 15th and were reviewed by the Camp Director, the Program Director, and Mr. DeGeorge (the Head Master of CAK). All those who applied were notified by February 20th if they would be able to participate in the program or not (the only factors keeping someone from being able to participate were grades and/or behavior problems at school).

The current research study was explained to the students and parents at the information meeting. All of the students wishing to participate in the program agreed to take part in the study as the treatment group. These students and their parents were given Informed Consent Forms and were asked to read them carefully, sign them, and bring them completed to the first training session at UT, on February 25th (see Appendix C for complete Informed Consent Forms for both the treatment and control groups).

After determining who would be in the treatment group, the Principal Investigator tested all other students at CAK in grades 6-12. After the scores of both the treatment and the control group on the pretest ATDP were analyzed, those students in the potential control group who matched the students in the treatment group on the basis of gender, age, and score on the test were notified and asked to be in the control group. All those who were notified agreed to participate in the study as the control group.

Both the treatment and the control group were tested three different times, at the beginning of the training sessions (providing baseline information on all subjects), immediately before leaving for camp, and then once again after returning from camp. The treatment group attended four training sessions at the University of Tennessee, one all day session in Crossville with the UT students on a ropes course, the week-long residential camp in Crossville from April 17th to April 22nd, 1995, and one final session where they were given the ATDP scale for the last time and were shown a 45-minute slide show of the entire week of camp along with the UT students (see Appendix D for a time line of events occurring in the study). The control group was tested at the same times as the treatment group, only they were given the test after school at Christian Academy.

Different teaching formats were employed during the program. After the pretest, the treatment group was exposed to the first teaching format: training sessions including class lectures, video tapes, basic sign language instruction, ropes course elements, and simulations of problems faced by persons with disabilities (see Appendix E for an outline of each training session). Both the treatment and the control group were then administered the midtest prior to leaving for camp to assess any attitude changes occurring as a result of the

classroom exercises (pretest compared with the midtest). During the week of camp, the subjects were paired with a same-age person with a disability (or quite possibly multiple disabilities) for the entire week. The pair, along with a counselor, was involved in all of the week's camp activities together. This segment of the program included the second teaching format: experiential education. After returning from camp, the treatment and the control group were tested for the final time with the ATDP scale in order to measure attitude changes occurring as a result of both the camp experience (midtest compared with the post-test) and the attitude changes resulting from participation in both the training sessions and camp (pretest compared with the post-test).

Analysis of Data

The mean scores and the standard deviations on the ATDP scale of the control group and the treatment group were compared from pretest to midtest, midtest to posttest, and pretest to posttest. This information was used to assess the benefits of the in-class teaching method, the experiential education teaching method, and overall participation in the program. The score differences were investigated for both the treatment and the control groups as well as for gender. Correlated t-tests were done after each test was taken to measure the differences in the test scores of the treatment and the control groups. Independent samples t-tests were done after each test was given to determine the difference in scores of the males and females in both the treatment group and the control group.

Summary

Chapter three outlined the methodology of the current study. Selection of the research participants was included, along with an explanation of the distinction between the treatment group and the control group. The instrument used in this study, the Attitudes Towards Disabled Persons scale, was explained and information about its reliability and validity was given. The chapter ended with a brief description of how the data was analyzed.

CHAPTER FOUR

Results

This chapter outlines the results of the administration of the Attitudes Toward Disabled Persons scale. The chapter is divided into different sections to discuss the outcomes of the different aspects of the study, including results of the overall study, sub-problem one, and sub-problem two. Also included in this chapter are the results of an internal consistency test conducted on the ATDP scale and the results of a written evaluation taken by all of the peer counselors (treatment group) who participated in the Camp Koinonia program.

Overall Results of the Study

The purpose of this study was to measure the attitudes of nondisabled middle and high school students toward their disabled peers and to see whether or not these attitudes were positively affected after participating in the Camp Koinonia program. The Attitudes Toward Disabled Persons (ATDP) scale was administered three times during the course of a semester. At the onset of the study the treatment group and the control group both consisted of 19 people, for a total of 38 subjects matched on the basis of age, gender, and score on the pretest of the ATDP. However, due to the loss of subjects in both the treatment and the control group, the study ended with only 14 pairs of subjects, or 28 participants in the study.

The ATDP was administered to both the treatment and control group before the treatment group began a number of training sessions for the Camp Koinonia program (pretest), a second time before the treatment group attended the one-week camp where they were integrated and matched with a same-age

disabled peer (midtest), and then a final time when the treatment group returned from camp (post-test). The scores on the ATDP scale could range anywhere from 30, being interpreted as the most positive score possible, to 180, being interpreted as the most negative score possible. The scores for all three tests for both the treatment group and control group are shown in Table 1 and Table 2, along with the means and standard deviations for each group at each administration of the test. The subjects were given a number, with each pair designated by the same number. The distinguishing feature to identify the control group is the "A" after their number.

Although the ATDP scores from the pretests, midtests, and post-tests were not found to be significantly different at the .05 level, the treatment group was shown to experience a more positive change than the control group. The mean scores for the treatment group did in fact become lower, signifying a more positive attitude, as the program progressed. The mean scores for the control group fluctuated somewhat with each administration of the test, but actually ended up slightly higher, signifying a more negative attitude, at the post-test than at the pretest. The changes in both groups scores, however, were too small to be considered significant. Correlated groups t-tests were used to test for the significance of the change of scores from pretest to midtest, midtest to post-test, and pretest to post-test for both the treatment and the control group. The most significant change in mean score was seen in the pretest to post-test comparison of the treatment group. This change was not significant at the .05 level, but was significant at the .06 level.

Table 1. Treatment group's test scores on the ATDP scale including overall means and standard deviations.

Subject Number	Test #1 Pretest	Test #2 Midtest	Test #3 Post-test
1	138	109	110
2	110	103	102
5	84	88	90
7	124	109	96
8	113	96	102
10	87	86	86
11	97	92	88
12	105	102	88
13	82	92	79
15	105	99	97
16	90	94	105
17	98	92	92
18	94	97	101
19	95	104	94
MEAN SCORE	101.57	97.36	95.00
STD DEV	15.76	7.27	8.48

Table 2. Control group's test scores on the ATDP scale including overall means and standard deviations.

Subject Number	Test #1 Pretest	Test #2 Midtest	Test #3 Post-test
1A	122	119	114
2A	111	107	109
5A	83	78	84
7A	111	104	111
8A	102	99	94
10A	87	11	107
11A	99	97	101
12A	104	112	110
13A	95	106	110
15A	107	95	97
16A	93	93	79
17A	98	97	97
18A	93	100	96
19A	93	97	92
MEAN SCORE	99.86	101.07	100.07
STD DEV	10.49	9.99	10.67

Sub-problem One: The effects of gender on the changing of attitudes of the nondisabled students toward the disabled.

Independent groups t-tests were done to test for the effects of gender on the attitudes toward disabled peers. Although there were no significant differences ($p < .05$) found between the males and females in either the treatment or control group, it was interesting to note that at all test times but one (Test #3 for the treatment group), the females had slightly higher mean scores than the males. This indicates that the males had slightly more positive attitudes than the females in the study, almost across the board. Table three outlines the mean scores for males and females in both the treatment group and the control group at each test time.

Table 3. The mean scores of males and females at each administration of the ATDP scale.

Subject Group & Number	Test #1 Pretest	Test #2 Midtest	Test #3 Post-test
Treatment-Female (n=8)	104.75	97.5	94.63
Treatment-Male (n=6)	97.33	97.17	95.50
Control-Female (n=8)	101.50	103.38	101.50
Control-Male (n=6)	97.67	98.00	98.17

Sub-problem Two: The effects of various teaching formats on the changing of attitudes of the nondisabled toward the disabled.

The subjects in this study were tested at three different times. The first test was used to establish a baseline from which all subsequent tests were compared. The second test was then compared to the first test to assess the change that had occurred after the first teaching format, in-class instruction. The third test was given after the treatment group returned from camp and was compared to the second test to assess the change that had occurred as a result of the second teaching format, experiential education. Test #3 was also compared to test #1 to assess the value of the overall program.

No significant differences were found at the .05 level when comparing the mean scores of the treatment group between tests one and two and tests two and three. A significant difference did occur ($p=.06$) when the mean scores from test three were compared to the mean scores of test one. This indicates that the program overall, both the in-class instruction and the experiential education, had the greatest effect on the participants. The differences between the scores of test two and test three, however, were not significant enough to indicate whether one teaching format was more effective than the other.

The control group showed very little difference between their mean scores on test one and test two, test two and test three, and test one and test three, implying that the differences, though not significant at the .05 level, that occurred in the treatment group, did not occur in both groups. According to the correlated groups t-tests that were conducted on the scores of the treatment and the control group at each test time, the mean scores of the treatment group did become lower (meaning more positive) than those of the control group each time the test was given subsequent to test #1, but not at the .05 level.

Internal Consistency of the ATDP scale: Results of a Correlation Analysis

A correlation analysis, the Cronbach Coefficient Alpha, was conducted on the ATDP scale using the scores received from the subjects of the present study. The analysis indicated that the coefficient alpha for the subjects in this study was 0.616 (zero equals no correlation and one equals perfect correlation). This score indicates that the internal consistency of the ATDP scale for this group was not very strong. This may have been a cause for the lack of significant differences found in the study. After analyzing many of the subjects' tests, it was apparent that even though their overall scores from test to test were quite similar, the way they scored on each item varied significantly. After reviewing the individual tests and conducting this analysis, the researcher began to question the validity of the results of the ATDP scale with this particular population.

Results of an additional Peer Counselor Evaluation

At the end of the Camp Koinonia program, each member of the treatment group was given a "Peer Counselor Evaluation" to complete. This evaluation asked the participants to rate from 1 to 5 (one being very effective, five being not effective) all aspects of the program. The evaluation also included space for comments regarding many of the aspects of camp, and some open ended questions relating to the overall camp experience.

The results of the evaluations were summarized using content analysis procedures. The evaluation was conducted independently of this study, but the findings were so relevant that they were included in this chapter. The results of the evaluation were overwhelmingly positive. Every item on the evaluation

received an average score of either 1 or 2 (1 equals "very effective" and 2 equals "somewhat effective"), with the exception of one item, a puppet show which received an average score of 3.2 (3 equals "average"). This leads one to believe that the peer counselors found the program to be quite effective. In response to the question "How beneficial was the Camp Koinonia experience for you?" 100% of the subjects answered "1", meaning very beneficial. All but one respondent said he/she would attend camp again and would recommend the camp to friends (the remaining one respondent answered "maybe" to both questions).

Relating this evaluation to the purpose of this study, it was interesting to see how the treatment group responded to one question in particular. When asked, "How has the Camp Koinonia experience affected your view of individuals with disabilities?", the respondents gave very insightful and mature answers. Some of the most common statements made by the peer counselors were: "It [camp] has made me a lot more comfortable around them," "They have the same feelings and can do many of the same things as nondisabled people," and "Before camp I was scared of people with disabilities- I didn't know how they would act or look. Now I know they are the same as me, they just have to work a little harder to accomplish their goals." These statements, along with many others made on the evaluation, suggest that a degree of maturity and open-mindedness was developed within many of the peer counselors as a result of the Camp Koinonia program. See Appendix F for a copy of the Peer Counselor Evaluation and the tallied results.

Summary

This chapter outlined the statistical results of the data analysis conducted on the ATDP scale taken by the subjects in this study. The results were analyzed as a whole and by sub-problems. The results were discussed and plausible explanations were given. Results of an internal consistency analysis that was conducted on the ATDP scale were also included and related to the overall results of the study. Finally, the outcome of an additional evaluation given to the treatment group at the end of the program was reported and discussed as it relates to the present study.

CHAPTER FIVE

Summary, Conclusions, and Recommendations

This chapter begins with a summary of the present study. This is followed by the researchers conclusions based on the results of the data analysis, and recommendations for further research. The recommendations are based on the overall outcome of the present study.

Summary of the Study

The purpose of this study was to measure the effects of an integrated outdoor education and recreation program on the attitudes of nondisabled middle and high school students toward their disabled peers. Two sub-problems were also investigated: the effects of gender and the effects of various teaching methods on the attitudes of the nondisabled toward the disabled.

Twenty eight individuals participated in the study; 14 in the treatment group, and 14 in the control group. The subjects included 16 females and 12 males. The ages of the subjects ranged from 10-18. Subjects were recruited from the Christian Academy of Knoxville and from a home schooled group.

The Attitudes Toward Disabled Persons (ATDP) scale, developed by Yuker, Block, and Youngg in 1970, was used as the instrument to measure the attitudes of the subjects. The treatment and the control group were administered this test three times during the course of the program. The first administration of the test served as a baseline to which subsequent test scores could be compared. This test was given prior to the treatment group's actual involvement in the program. The test was administered a second time after the

treatment group completed a series of training sessions that were focused on preparing them with appropriate skills and strategies for the week-long camp experience. The third and final administration of the test occurred after the treatment group returned from the week-long Camp Koinonia program where they were matched for the week with a same-age, same-gender, disabled peer. The control group received no training and was not involved in the camp experience.

Scores on the ATDP were analyzed and found to show no significant differences at the .05 level between test one and test two, test two and test three, and test one and test three. There were also no significant differences found between the scores of the treatment group and control group at each administration of the test. Although not significant at the .05 level, there was a trend identified in the scores of the treatment group. The mean scores on the ATDP for the treatment group become increasingly more positive as the program progressed. Such a trend was not seen in the scores of the control group. A significant difference in scores was noted in comparing the mean of the first test scores with the mean of the third test scores for the treatment group ($p=.06$). This indicates that the program overall, both the training sessions and the camp experience, had the greatest effect on the subjects' attitudes. Significant differences were not found between the two different teaching formats.

Conclusions

The purpose of this study was to see if patterns of positive attitudes would become evident as a result of the subjects' involvement in the training sessions and the camp experience. Because of the limitations of the current study and

the lack of significant findings at the .05 level, it is not possible to draw definitive conclusions from this study. It is possible, however, to identify some of the patterns that occurred.

Based on the analysis conducted on the scores of the ATDP scale in this study, there were no significant differences found at the .05 level between the treatment and control group, or between the three administrations of the test for the treatment group. The most significant difference ($p=.06$) was found when comparing the treatment group's pretest and post-test scores. This seemed to indicate that the program overall, the combination of the in-class instruction and experiential education, had the most beneficial effect on the program participants (treatment group).

There were no significant differences seen in the scores on the ATDP scale in relation to the two different teaching formats. This led the researcher to conclude that neither of the two teaching formats, in-class instruction or experiential education, could be valued over the other. Instead, the results suggest that optimal results could be found when using both together. This outcome seemed to support the findings of Decker (1987) who argues that it is imperative that training and planning take place in an effort to facilitate the right atmosphere for integrated programs to succeed. She referred to such an atmosphere as "building community" and stressed that it was necessary for program planners to foster the acquaintances of the nondisabled and disabled, ensuring that friendships and group cohesion would emerge (Decker, 1987).

There also were no significant differences in the scores of the males and females in this study. It was, however, interesting to note that the males had slightly more positive mean scores in almost every case in this study. The lack of significant differences in gender seems to imply that the attitudes of this

population have less to do with what gender they are, and more to do with what experiences they have had and who they are as individuals.

The results of an internal consistency analysis left the researcher doubting the validity of the outcomes seen in the ATDP scores in this study. The Cronbach Correlation Alpha was used to determine the consistency with which the subjects responded to the ATDP scale. The alpha coefficient of the test resulted in a 0.616 correlation. Although this score is slightly above average, it does not denote a high level of internal consistency. It was concluded that this may have had an effect on the lack of significant findings based on the scores of the ATDP scale in this study.

A final independent evaluation given to all peer counselors (treatment group) resulted in very positive information about the impact and effectiveness of the Camp Koinonia program. This led the researcher to the conclusion that whether or not the ATDP scale provided solid evidence that attitudes were improved, the overall program was very beneficial to the participants. The fact that 94.4% of the peer counselors said that they would participate in the program again, and would recommend Camp Koinonia to a friend suggests that the program was quite successful. The way in which the peer counselors responded to questions on the evaluation about how the program benefited them, and how their attitudes were changed as a result of participation were so insightful and mature that it was hard not to believe that most of them had a very educational and life-changing experience. It was concluded that the study may have produced very different outcomes had the researcher used a more qualitative approach to data analysis.

Recommendations

Based on the outcome of the present study, there are several recommendations for further research. They are as follows:

1. A similar study to this one could be conducted using a different approach to data analysis. A qualitative approach, such as an interview or open-ended questionnaire may provide a more accurate and informative picture of what occurs as a result of participation in the Camp Koinonia program.
2. It would be very interesting and insightful to conduct a similar study with a focus on the benefits to the disabled campers of having peer counselors attend Camp Koinonia. This would not be an attitudinal study as this one was, but rather one that measures the overall benefits to the disabled campers. Most likely, a qualitative approach would be the most effective means for conducting a study of this kind.
3. A similar attitudinal study could be conducted based on an integrated program that is longer in duration. One week is a short period of time to expect life-time attitudes to be drastically changed. More significant findings may emerge from an experience that is longer in duration than a week.
4. More accurate findings based on the ATDP scale may be found using an older population as subjects. This test may be more suitable for older participants than for adolescents.

Based on the results of this study, the researcher offers the following recommendations for future programs to enhance the learning about and understanding of the needs of persons with disabilities:

1. It is strongly recommended that the Camp Koinonia program remain integrated, involving middle and high school age peer counselors. The responses from the peer counselors and their parents were so positive that it would be a loss for others to not have the same opportunity for such an experience. From what was observed during the week at camp, it is also believed that the presence of peer counselors was quite beneficial to the campers with disabilities. The opportunity for both the disabled and nondisabled to learn and grow from the relationships that are formed at Camp Koinonia is certainly invaluable.

2. More integrated programs should be established in the community as a whole. Individuals should not be limited to yearly events such as Camp Koinonia, but rather should have the opportunity to live, work, and play together throughout the year. The more studies that can be conducted to justify the benefits of such programs, the more receptive the general population will be to the possibility of establishing and participating in such programs. It is sad commentary on our society that programs such as these still need justification.

Summary

This chapter began with a general overview of the present study. This was followed by the researcher's conclusions based on the outcome of the data analysis conducted on the scores of the ATDP scale. The final section was

devoted to presenting recommendations for further research, and ideas about how to build upon what has been learned in the present study. Recommendations for future integrated programs were also included in this section.

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APPENDICES

APPENDIX A

DEMOGRAPHIC QUESTIONNAIRE

Please fill out the following before taking the Attitudes Toward Disabled Persons scale. Thank you.

Name _____ Phone No. _____

No.: _____

No.: _____

Age: _____

Gender: Female or Male

Have you had previous contact with persons with disabilities?

Circle one: Yes No

If yes, would you briefly explain how recently you were in contact with this person(s) and what the nature of the contact was.

For example:

When I was in third grade there was a girl in a wheel chair in my class.

or

My brother has Down's Syndrome and we have grown up together. He is 2 years younger than me.

APPENDIX B

ATDP SCALE - FORM B

Read each statement and mark an "x" in the space next to the degree to which you agree or disagree with each statement.

1. Disabled persons are usually friendly.
1. ☐ I disagree very much 4. ☐ I agree a little
2. ☐ I disagree pretty much 5. ☐ I agree pretty much
3. ☐ I disagree a little 6. ☐ I agree very much
2. People who are disabled should not have to pay income taxes.
1. ☐ I disagree very much 4. ☐ I agree a little
2. ☐ I disagree pretty much 5. ☐ I agree pretty much
3. ☐ I disagree a little 6. ☐ I agree very much
3. Disabled people are no more emotional than other people.
1. ☐ I disagree very much 4. ☐ I agree a little
2. ☐ I disagree pretty much 5. ☐ I agree pretty much
3. ☐ I disagree a little 6. ☐ I agree very much
4. Disabled persons can have a normal social life.
1. ☐ I disagree very much 4. ☐ I agree a little
2. ☐ I disagree pretty much 5. ☐ I agree pretty much
3. ☐ I disagree a little 6. ☐ I agree very much
5. Most physically disabled persons have a chip on their shoulder.
1. ☐ I disagree very much 4. ☐ I agree a little
2. ☐ I disagree pretty much 5. ☐ I agree pretty much
3. ☐ I disagree a little 6. ☐ I agree very much
6. Disabled workers can be as successful as other workers.
1. ☐ I disagree very much 4. ☐ I agree a little
2. ☐ I disagree pretty much 5. ☐ I agree pretty much
3. ☐ I disagree a little 6. ☐ I agree very much
7. Very few disabled persons are ashamed of their disabilities.
1. ☐ I disagree very much 4. ☐ I agree a little
2. ☐ I disagree pretty much 5. ☐ I agree pretty much
3. ☐ I disagree a little 6. ☐ I agree very much
8. Most people feel uncomfortable when they associate with disabled people.
1. ☐ I disagree very much 4. ☐ I agree a little
2. ☐ I disagree pretty much 5. ☐ I agree pretty much
3. ☐ I disagree a little 6. ☐ I agree very much

9. Disabled people show less enthusiasm than non-disabled people.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |
10. Disabled people do not become upset any more easily than nondisabled people.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |
11. Disabled people are often less aggressive than normal people.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |
12. Most disabled persons get married and have children.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |
13. Most disabled persons do not worry any more than anyone else.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |
14. Employers should not be allowed to fire disabled employees.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |
15. Disabled people are not as happy as nondisabled ones.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |
16. Severely disabled people are harder to get along with than are those with minor disabilities.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |
17. Most disabled people expect special treatment.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |

18. Disabled persons should not expect to lead normal lives.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |
19. Most disabled people tend to get discouraged easily.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |
20. The worst thing that could happen to a person would be for him/her to be severely injured.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |
21. Disabled children should not have to compete with nondisabled children.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |
22. Most disabled people do not feel sorry for themselves.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |
23. Most disabled people prefer to work with other disabled people.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |
24. Most severely disabled persons are not as ambitious as other people.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |
25. Disabled persons are not as self-confident as physically normal persons.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |
26. Most disabled persons don't want more affection and praise than other people.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |

27. It would be best if a disabled person would marry another disabled person.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |
28. Most disabled people do not need special attention.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |
29. Disabled persons want sympathy more than other people.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |
30. Most physically disabled persons have different personalities than normal persons.
- | | |
|--|---|
| 1. ☐ I disagree very much | 4. ☐ I agree a little |
| 2. ☐ I disagree pretty much | 5. ☐ I agree pretty much |
| 3. ☐ I disagree a little | 6. ☐ I agree very much |

APPENDIX C

The effects of an integrated outdoor education and recreation program on the attitudes of nondisabled middle and high school students toward their disabled peers.

Informed Consent Form-Treatment Group

This project involves research on the possible attitude change of nondisabled middle and high school students as an outcome of participation in a program called Camp Koinonia. Camp Koinonia is a week-long residential outdoor education and recreation program for persons with multiple disabilities. Counselors for the camp are students who are enrolled in a class entitled "Outdoor Education for Disabled Children" at the University of Tennessee. The counselor to camper ratio is one-to one. This will be the first year that nondisabled students will be integrated into the program as peer counselors.

As a subject in this research study, you will be expected to attend five training sessions at the University of Tennessee, one all day training session on a ropes course in Crossville (with the UT students), and the residential Camp Koinonia for the week of April 17-22, 1995 at the Clyde M. York 4-H Training Center in Crossville, TN. You and/or your parents will be responsible for your transportation to and from camp. While at camp, you will be paired with a disabled peer as well as with a university student as your counselor.

You will be asked to take the Attitudes Toward Disabled Persons (ATDP) scale at three different times during the course of the semester. You will be given a number, and your name will never be attached to the results of your tests. The names of the participants in this study will remain strictly confidential.

Participation in this study will hopefully benefit you by giving you an increased understanding of persons with disabilities, some basic knowledge of sign language, information about the nature, causes, and prognosis of several different disabilities, an opportunity to make new friends (both with U.T. students, as well as with the campers with disabilities), and an improved perception of persons with disabilities. Your participation in this program will also benefit the campers with disabilities, as they will have the opportunity to make new friends with and learn new skills and positive habits from their nondisabled peers.

There are no foreseeable risks involved in this study. Your participation is voluntary and you may withdraw from the study at any time without penalty or loss of opportunity to continue your involvement in the Camp Koinonia Program.

For any questions pertaining to this research please contact:

Julie Higley or Dr. Gene Hayes
1914 Andy Holt Avenue
Dept. of Health, Leisure, and Safety Sciences
Knoxville, TN 37996-2073
(615)974-6045

I, _____, have read the above description of this study and do hereby give my informed consent for the use of my test results on the ATDP scale to be used for research purposes only. I understand what is

involved in my participation in this study and that I may withdraw at any time with no penalty to me. I understand that my participation in the Camp Koinonia Program can be in no way affected by my participation in this research study.

Signature of the Subject

Date

Signature of the Parent

Date

The effects of an integrated outdoor education and recreation program on the attitudes of nondisabled middle and high school students toward their disabled peers.

Informed Consent Form-Control Group

This project involves research on the possible attitude change of nondisabled middle and high school students as an outcome of participation in a program called Camp Koinonia. Camp Koinonia is a week-long residential outdoor education and recreation program for persons with multiple disabilities. Counselors for the camp are students who are enrolled in a class entitled "Outdoor Recreation for Disabled Children" at the University of Tennessee. The counselor to camper ratio is one-to one. This will be the first year that nondisabled students will be integrated into the program as peer counselors.

As a subject in this research study, you will not be expected to attend any training sessions, nor will you be expected to attend Camp Koinonia. You will be asked to take the Attitudes Toward Disabled Persons (ATDP) scale at three different times during the course of the semester. You will be given a number, and your name will never be attached to the results of your tests. The names of the participants in this study will remain strictly confidential.

Your participation in this study will hopefully benefit other nondisabled students who wish to attend Camp Koinonia in the future. There are no foreseeable risks involved in this study. Your participation is voluntary and you may withdraw from the study at any time without penalty.

For any questions pertaining to this research please contact:

Julie Higley or Dr. Gene Hayes
1914 Andy Holt Avenue
Dept. of Health, Leisure, and Safety Sciences
Knoxville, TN 37996-2073
(615)974-6045

I, _____, have read the above description of this study and do hereby give my informed consent for the use of my test results on the ATDP scale to be used for research purposes only. I understand what is involved in my participation in this study and that I may withdraw at any time with no penalty to me.

Signature of the Subject

Date

Signature of the Parent

Date

APPENDIX D

Time Line of Events in the Current Research Study

February 25	March 6	March 13	April 1	April 3	April 17	April 22	April 26
Training Session #1 (at UT)	Training Session #2 (at UT)	Training Session #3 (at UT)	Training Session #4 (Crossville- on the ropes course)	Training Session #5 (at UT)	CAMP KOINONIA (in Crossville)		Final Meeting (at UT)
ATDP Pretest				ATDP Midtest			ATDP Post-test

APPENDIX E

CONTENT OF TRAINING SESSIONS

SESSION ONE

- *Take roll, take up informed consent forms
- *Get acquainted activity
- *Administer ATDP (pretest)
- *Overview: What is Camp Koinonia?
- *Discussion: Role at camp as peer counselors
- *Pass out and take up contracts
- *Sign Language Instruction
- *Lecture: Outdoor education for persons with disabilities (goals and purposes for camp)
- *Close with song for camp

SESSION THREE

- *Take roll
- *Sign Language Instruction
- *Movie: "They don't come with manuals"
- *Lecture: Disabilities (cont'd)
 - Autism
 - Cerebral Palsy
 - Epilepsy
- *Discussion: Modifying to meet individuals' needs; working with wheelchairs
- *Practice: lifting and transferring
- *Small Groups: role play different situations
- *Close with song for camp

SESSION TWO

- *Take roll
- *Discussion: Theme of camp
- *Movie: "Somebody Waiting" (relate movie to camp)
- *Sign Language Instruction
- *Lecture: Behavior Modification
- *Discussion: Physical, behavioral, and emotional characteristics of our campers (how to work with them)
- *Lecture: Intro to disabilities
 - Learning Disabilities
 - Mental Retardation
 - Hearing Impaired
 - Visually Impaired
- *Close with song for camp

SESSION FOUR

- *Ropes Course Day with the UT students at the Crossville 4-H Training Center
- *Middle and Highschool students will be integrated into their cabin groups with the UT students for the day

SESSION FIVE

- *Take roll
- *Sign Language Instruction
- *Review details about camp
 - when to arrive & leave
 - transportation
 - what to bring
 - medications
 - answer questions
- *Pass out profiles of disabled campers to the nondisabled students (as well as name of counselor)
- *Small groups to discuss their campers, answer questions
- *Administer ATDP (midtest)
- *Close with song for camp

SESSION SIX

- *Take roll
- *Administer ATDP (posttest)
- *Watch the slide presentation of 1995 Camp Koinonia along with the UT class (parents are welcome)
- *End of program

APPENDIX F

CAMP KOINONIA
Peer Counselor Evaluation Form
1995

Use the following scale to evaluate the Monday night training sessions and the week long camping experience.

1 = Very Effective 2 = Somewhat Effective 3 = Average 4 = Little Effective 5 = Not Effective

- | | | | | | | |
|----|--|---|---|---|---|---|
| 1. | How helpful were the Monday night training sessions? | 1 | 2 | 3 | 4 | 5 |
| | Comments: _____ | | | | | |
| | _____ | | | | | |
| | _____ | | | | | |
| 2. | How helpful was Dr. Hayes? | 1 | 2 | 3 | 4 | 5 |
| | Comments: _____ | | | | | |
| | _____ | | | | | |
| | _____ | | | | | |
| 3. | How helpful were the graduate students? | 1 | 2 | 3 | 4 | 5 |
| | Comments: _____ | | | | | |
| | _____ | | | | | |
| | _____ | | | | | |
| 4. | What information given in the training sessions benefitted you the most at camp? | | | | | |
| | Comments: _____ | | | | | |
| | _____ | | | | | |
| | _____ | | | | | |
| 5. | Any other comments/suggestions about the Monday night training sessions? | | | | | |
| | _____ | | | | | |
| | _____ | | | | | |
| | _____ | | | | | |
| 6. | The overall effectiveness of the ropes course activities on Saturday, April 1 was: | 1 | 2 | 3 | 4 | 5 |
| 7. | Meeting with leaders in the activity areas on Monday was: | 1 | 2 | 3 | 4 | 5 |

22.	Computer Lab	1	2	3	4	5
23.	Cycling	1	2	3	4	5
24.	Horseback Riding	1	2	3	4	5
25.	Music and Movement	1	2	3	4	5
26.	Nature Lab	1	2	3	4	5
27.	Canoes	1	2	3	4	5
28.	Ropes	1	2	3	4	5
29.	Cooking	1	2	3	4	5
30.	Tuesday Night Carnival/Hayride	1	2	3	4	5
31.	Monday First Night Fun	1	2	3	4	5
32.	Tuesday Night Puppet Show	1	2	3	4	5
33.	Wednesday Night Court	1	2	3	4	5
34.	Thursday Night Dance	1	2	3	4	5
35.	Friday Night Scavenger Hunt/Ice Cream	1	2	3	4	5
36.	Overnight Camping	1	2	3	4	5

What suggestions to you have for other activities at camp? _____

37.	How enjoyable was your involvement in the Camp Koinonia program:	1	2	3	4	5
38.	How effective was the Head Counselor:	1	2	3	4	5
39.	How effective were the counselors at including you in the activities of the group:	1	2	3	4	5

Please evaluate each of the elements on the ropes course you went through on Saturday April 1:

8.	The Trolley	(Heather)	1	2	3	4	5
9.	Spider's Web	(Amy)	1	2	3	4	5
10.	Nitro Crossing	(Jo)	1	2	3	4	5
11.	The Wall	(Cathy)	1	2	3	4	5
12.	Triangle Traverse	(Jill)	1	2	3	4	5
13.	Swinging Log	(Lara)	1	2	3	4	5
14.	River Walk	(Kristy)	1	2	3	4	5
15.	Track Walk	(Julie)	1	2	3	4	5
16.	The Muse	(Tim)	1	2	3	4	5
17.	Trust Fall	(Melanie)	1	2	3	4	5

Comments: _____

18. How effective was being involved in the ropes course in making you feel apart of the cabin group: 1 2 3 4 5

Comments: _____

Please evaluate how effective the programs were in meeting the your peer CAMPER'S needs and involving both of you in the activities:

19.	Outdoor Education	1	2	3	4	5
20.	Nature Crafts	1	2	3	4	5
21.	Sports and Games	1	2	3	4	5

40. Any other suggestions/comments about being involved in the Camp Koinonia experience?

41. How beneficial was the Camp Koinonia experience to you: 1 2 3 4 5

42. Would you attend Camp Koinonia again in the future? YES NO

43. Would you recommend being involved with Camp Koinonia to your friends?
YES NO

44. How has the Camp Koinonia experience effected your view of individuals with disabilities?

Peer Counselor Evaluation Results Camp Koinonia 1995

The following scale was used to evaluate several of the different aspects of Camp Koinonia, as the Peer Counselors perceived them to be.

1=Very Effective 2=Somewhat Effective 3=Average 4=Little Effective 5=Not Effective

Below is a summary of the results of the evaluation taken by 18 Peer Counselors. The average of the numerical responses for each item are given as well as any comments given. The comments are preceded by the frequency of which they were given.

1. How helpful were the Monday night training sessions? **1.8**
 Comments:
 - (1) "I was thankful for these classes because they helped us to adapt with what we were going to face."
 - (1) "They got me confident of the camp more than anything."
 - (1) "They helped me understand what to do at camp a lot."
 - (1) "The training courses prepared me for almost everything."
 - (1) "It helped me know what to expect there (what types of disabilities, etc.)."

2. How helpful was Dr. Hayes? **1.8**
 Comments:
 - (1) "He helped to encourage us."
 - (1) "He ran the joint."
 - (1) "I could have done without him."
 - (1) "It helped that he explained the disabilities to us."
 - (1) "He gave us good advice."
 - (1) "The videos he showed in class were OK- sort of relevant."
 - (1) "He helped me prepare for camp."

3. How helpful were the graduate students? **1.5**
 Comments:
 - (1) "If not for them, many of us would not have made it through camp."
 - (1) "They did most everything."
 - (1) "I wanted to go home Thursday if Julie had not been there- it helped a lot."
 - (1) "They were like older brothers and sisters."

4. What information given in the training sessions benefitted you the most at camp?
 Comments:
 - (1) Explanation of the learning disabilities.
 - (1) Information on how to adapt with the campers.

- (6) Sign Language.
 - (1) To "be patient".
 - (1) The lectures.
 - (1) The Ropes Course.
 - (1) That I was there to be a friend.
 - (1) The attitudes of the campers.
 - (4) How the campers would act - behavior.
 - (1) All of it.
 - (2) The videos.
 - (1) How to respond to a camper's needs.
 - (1) Knowing about different disabilities.
5. Any other comments/suggestions about the Monday night training sessions?
- Comments:**
- (1) They were great!
 - (1) Thanks for the work!
- Suggestions:**
- (1) Not so late in the evening- very inconvenient.
6. The overall effectiveness of the ropes course activities on Saturday, April 1. 1.6
7. Meeting with leaders in the activity areas on Monday. 1.6
- Evaluation of each element on the ropes course:**
- | | | | |
|-----|-------------------|-----------|-----|
| 8. | The Trolley | (Heather) | 2.4 |
| 9. | Spider's Web | (Amy) | 1.8 |
| 10. | Nitro Crossing | (Jo) | 1.6 |
| 11. | The Wall | (Cathy) | 1.7 |
| 12. | Triangle Traverse | (Jill) | 1.8 |
| 13. | Swinging Log | (Lara) | 1.9 |
| 14. | River Walk | (Kristy) | 2.6 |
| 15. | Track Walk | (Julie) | 2.1 |
| 16. | The Muse | (Tim) | 2.3 |

17.	Trust Fall	(Melanie)	1.7
-----	------------	-----------	-----

Comments:

- (1) "It pulled our group together."
- (1) "I didn't get what they were trying to tell me on some of them."
- (1) "Some stuff didn't seem relevant."
- (1) "It was good to get to know the counselors."

18.	How effective was being involved in the ropes course in making you feel a part of the cabin group?	1.4
-----	--	-----

Comments:

- (1) "It helped us get to know everyone better and how well we worked together."
- (1) "I felt accepted and befriended."

Evaluation of how effective the Peer Counselors felt the programs were in meeting their camper's needs and involving both of them in the activities:

19.	Outdoor Education	1.9
20.	Nature Crafts	1.9
21.	Sports and Games	1.7
22.	Computer Lab	2.7
23.	Cycling	1.5
24.	Horseback Riding	1.8
25.	Music and Movement	1.8
26.	Nature Lab	2.1
27.	Canoes	1.4
28.	Ropes	2.2
29.	Cooking	2.0
30.	Tuesday Night Carnival / Hayride	1.5
31.	Monday First Night Fun	1.9

32.	Tuesday Night Puppet Show	3.2
33.	Wednesday Night Court	2.2
34.	Thursday Night Dance	1.4
35.	Friday Night Scavenger Hunt/ Ice Cream Social	1.5
36.	Overnight Camping	1.5

What suggestions do you have for other activities at camp?

- (1) Archery
- (1) Riflery
- (2) Swimming
- (1) Maybe making some ropes events mandatory, for example the Spider's Web, the Trolley, and maybe the Swinging Log.

Comments:

- (1) "They all made us feel a part if it."
- (1) "I think they were all great!"

37.	How enjoyable was your involvement in the Camp Koinonia program?	1.2
38.	How effective was the Head Counselor?	1.2
39.	How effective were the counselors at including you in the activities of the group?	1.4
40.	Any other suggestions/comments about being involved in the Camp Koinonia experience?	
(1)	"It was a very good experience."	
(1)	"I'm glad I got the chance to serve."	
(1)	"I am truly thankful for all my blessings."	
(1)	"It changes you first thoughts of people with disabilities."	
(1)	"It was a new experience."	
(1)	"I'm just glad I got the chance to go."	
(1)	"I loved it and hope you'll do it again next year."	
41.	How beneficial was the Camp Koinonia experience for you?	1.0
42.	Would you attend Camp Koinonia again in the future?	
	YES: 94.4% MAYBE: .6% NO: 0%	

43. Would you recommend being involved with Camp Koinonia to your friends?
YES: 94.4% MAYBE: .6% NO: 0%
44. How has the Camp Koinonia experience effected you view of individuals with disabilities?
- (1) "It has made me very thankful for what I have and how much I can do."
 - (4) "It has made me a lot more comfortable around them."
 - (1) "I now know how to treat them."
 - (1) "They're no different than anyone else and deserve much respect."
 - (3) "They have the same feelings and can do many of the same things as nondisabled people."
 - (1) "A lot for the good!"
 - (1) "I realized that some people with disabilities have physical limitations but just trying to include them can make a world of difference to a camper."
 - (1) "It was fun and they're not so bad."
 - (1) "I still feel sorry for them."
 - (1) "Now I see that they are sweet and kind, just not the same as me."
 - (1) "This camp taught me that disabled people are not boring, gross, or embarrassing. They are just people with a different reason and meaning in life."
 - (1) "It is easier to be with people with disabilities and now I won't stereotype them."
 - (1) "Helped me understand their overall type of attitude."
 - (1) "I realize what I had to deal with for one measly week, these kids have to deal with their whole lives."
 - (2) "Before camp I was scared of people with disabilities-I didn't know how they could act or look. Now I know they are the same as me. They just have to work a little harder to accomplish their goals."
 - (1) "I appreciate all of their hard work and positive attitudes."
 - (1) "They are not helpless-they can do most things for themselves."
 - (1) "I understand more about disabilities."
 - (1) "I understand they need the same or more attention than us."

VITA

Julia Kershaw Higley is from Knoxville, Tennessee. She is a 1989 graduate of the Webb School of Knoxville. She received her Bachelor of Arts Degree from the University of Tennessee, Knoxville in Psychology with a minor in Business Administration in the spring of 1993.

In the fall of 1993 Mrs. Higley began working toward a Master of Science Degree at the University of Tennessee, Knoxville in the Recreation and Leisure Studies Program, with an emphasis in Therapeutic Recreation. She accepted a graduate research assistantship under the direction of Dr. Gene A. Hayes, Chairperson of the Recreation and Leisure Studies Program, at that time and remained in that position throughout her two years of graduate school.

After completing her course work, Mrs. Higley was granted an internship at Peninsula Village in Louisville, Tennessee where she worked with chemically dependent and emotionally disturbed adolescents. She was awarded her degree at the culmination of her thesis in August 1995.

Mrs. Higley currently resides in Knoxville and is planning to pursue further education. She will be a Graduate Teaching Assistant for the Department of Health, Leisure, and Safety Sciences at the University of Tennessee, Knoxville for the 1995-96 academic year.